

NORTHERN OILFIELD SOLUTIONS, LLC

FACILITY RESPONSE PLAN

MAY 2017

Revision 4 June 2020

LOG OF PLAN REVIEW AND AMENDMENTS

Review / Amend Date	Reviewer	Amend Plan (Yes/No)	Description of Review / Amendment	Affected Page(s)
Aug 2013	CG/ Renfroe and NOSI	Yes	Incorporate emergency contact information from CPLAN directly into FRP. Update signature on Substantial Harm Criteria form. Additional updates resulting from CPLAN amendment (updated personnel, tank table; facility diagrams, Chadux equipment updates).	ROR-1; Table of Contents (i-v); Response Plan Cover Sheet (vii); Cross Ref Table (xi); Qualified Individual (1-3); Added Tables 1-3; updated Tables 4-5, 11 and resulting table number changes and references; Facility Diagrams (9-3, 9-4); Tank Table (A-1 thru A-4).
May 2014	CG/ Cleverdon	Yes	Incorporate edits from CG review: add CG Cross-Reference Table; add NOSI physical address to response plan cover sheet; add CG as agency receiving submittal along with EPA; add federal Oil Spill Report Form; update training requirements; update vessel and vessel transfer information; reference CG response planning standards; reference in plan that MSDSs will be placed in each truck. Update page numbers.	ROR-1; Table of Contents (i-v); Response Plan Cover Sheet (vii); Distribution List (ix); Cross Ref Tables (xi-xv); Intro (1); Table 2 (1-3); Section 1.3 and Fig 1 (1-5); Section 3 (3-1); Section 4.1 (4-1); Section 4.3 (4-3); Section 5 (5-1); Tbl 9 (5-3); Section 5.2 (5-10 to 5-11); Tbl 13 (5-13); Section 7.3 (7-3 to 7-5); App E
March 2016			Update NOSI Anchorage office address. Update NANA Update emergency contact information. Update Response Equipment List with Chadux website information. Update secondary muster area in Section 1.7 Evacuation Plan. Update figures and facility description to address reconstructed tank truck loading areas. Updates to Table 6 Hazard Identification Impoundments to address reconstructed Old Warehouse storage. Updates to Section 7.4 Spill Response Training. Updates to Training Matrix. Update inspection dates and tank numbers in Appendix A.	ROR-1; Response Plan Cover Sheet (vii); 1.1 Qualified Individual Information (1-1); Table 1 Internal Emergency Contact List (1-2); Table 2 Incident Management Team Contact List (1-3) Response Equipment List and Location (1-7); 1.7 Evacuation Plan muster areas (1-8); Facility Information (2-1); Emergency Response Information (3-1); Table 6 Hazard Identification Surface Impoundments (4-1); Section 7.4 Spill Response Training (7-4); Table 20 Prevention, Safety, and Spill Responder Training Matrix (7-7 and 7-8); Security (8-1); Figure 1: Site Layout Block 301; Figure 2: Site Layout Block 303; Appendix A: Oil Storage Containers 55 Gallons and Greater
May 2017		Yes	Update entire plan including company, name, address, and contact information. Update FRP to be consistent with recently approved CPLAN.	All.

LOG OF PLAN REVIEW AND AMENDMENTS				
Review / Amend Date	Reviewer	Amend Plan (Yes/No)	Description of Review / Amendment	Affected Page(s)
August 2017	EPA / Melde	Yes	Add National Response Corporation Alaska (NRC) to the list of Acronyms. Clarify listing for disposal contractor NRC in Table 1. Add NRC, Federal National Response Center and EPA On Scene Coordinator to Table 3.	List of Acronyms (v); Section 1.2 - page (1-2) Table 1.; Section 1.2 – page (1-4) Table 3.;
October 2018	Internal / Steglich Hansen	Yes	Interim Addendum of FRP. Substantial Harm Signature page. Internal emergency contact list update. Incident Management Team Contact List. Statement of Contractual Terms	(vii) ; (viii); page (1-2) Table 1.; page (1-3) Table 2. ; Appendix C. ;
January 2019	Internal / Bentz Steglich	Yes	Update company name to Northern Oilfield Solutions, LLC and acronym to Northern throughout document (on specified pages and in all footers). Remove John Hansen.	Cover, ROR-2, v, vii, viii, x, 1, 1-1, 1-2, 1-3, 1-7, 1-8, 2-1, 3-1, 4-2, 5-1, 5-5, 5-8, 5-10, 6-2, 6-3, 6-4, 7-3, 7-4, 7-5, 7-7, 7-8, 8-1, 9-3, 9-4, 9-5, 9-6, Appendix Cover Pages (all), Appendix C, and Appendix E All footers
March 2020	Internal / Hodges Bentz	Yes	Update cover and footers on affected pages, revision log, QI and personnel lists, distribution list, company address, company phone, incident management team information, remove subarea and replace with area contingency plan, web links, acronyms Other changes include removing unnecessary language and blank pages; formatting; and changes designed to improve the readability of the plan and align it more closely with the CPLAN.	Cover through Section 9 ; Appendices not affected by changes

FACILITY RESPONSE PLAN

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List of Acronyms

°F	degrees Fahrenheit
ACS	Alaska Clean Seas
ADEC	Alaska Department of Environmental Conservation
API	American Petroleum Institute
AST	aboveground storage tank
CFR	Code of Federal Regulations
Chadux	Alaska Chadux Corporation
EPA	U.S. Environmental Protection Agency
ESA	environmentally sensitive area
FRP	Facility Response Plan
FRT	Field Response Team
ICS	Incident Command System
IMT	Incident Management Team
LEL	lower explosive limit
Northern	Northern Oilfield Solutions, LLC
NRC	National Response Center
NRC	National Response Corporation Alaska
CPLAN	Oil Discharge Prevention and Contingency Plan
OSHA	Occupational Safety and Health Administration
OSRO	oil spill removal organization
PEL	permissible exposure limit
PPE	personal protective equipment
PRAC	primary response action contractor
PREP	Preparedness for Response Exercise Program
QI	Qualified Individual
RRT	Regional Response Team
SDS	Safety Data Sheet
SRT	Spill Response Team
STI	Steel Tank Institute
TF	Task Force
USCG	U.S. Coast Guard
WCD	worst-case discharge

Response Plan Cover Sheet

Name: North Slope Terminal

Address: Deadhorse, North Slope, Alaska

Type: Oil Terminal Facility

Owner/Operator: Northern Oilfield Solutions, LLC
450 Alaskan Way, Suite 707
Seattle, WA 98104
907-659-2840 (Dedhorse)

Physical Address: Corner of Deadhorse Drive and Airport Way
Deadhorse, Alaska
Lot 2B, Block 301 and Lots 1 & 6 of Block 303

Latitude: N 70 degrees, 12 minutes, 1.1376 seconds

Longitude: W - 148 degrees, 27 minutes, 52.6818 seconds

Primary Contact: Tim Hunter
Operations Manager and Initial On Scene Commander
907-359-1291 (cell)

Onsite Contact: Mike Hannon / Brian Graves
Lead
907-943-1170 (cell)

NAICS Code: 24710

Largest Aboveground Oil Storage Tank (Gallons): 203,596 gallons

Number of Aboveground Oil Storage Tanks: 24

Maximum Oil Storage Capacity (Gallons): 1,423,748 gallons

Worst-Case Discharge Volume (Gallons): 203,596 gallons (See Appendix B for calculations)

Facility Distance to Navigable Water (Mark the appropriate line):

0 - ¼ mile X ¼ - ½ mile ½ - 1 mile 1 mile


Applicability of Substantial Harm Criteria

Facility Name: Northern Oilfield Solutions, LLC – Deadhorse Terminal

Facility Address: 1001 Airport Way, Prudhoe Bay, AK 99734

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons? ☒ Yes
☐ No
2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area? ☐ Yes
☒ No
3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III to this appendix or a comparable formula¹) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? ☒ Yes
☐ No
4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III to this appendix or a comparable formula¹) such that a discharge from the facility would shut down a public drinking water intake?² ☐ Yes
☒ No
5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil discharge in an amount greater than or equal to 10,000 gallons within the last 5 years? ☐ Yes
☒ No

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.


Donal C. Stone (Jun 11, 2020 10:55 PDT)

Signature of Donal Stone
President

Jun 11, 2020

Date of Approval

Distribution List

<u>NAME AND ADDRESS</u>	<u>NUMBER OF COPIES</u>
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Environmental Department, SharePoint	1 electronic
CG COTP Sector Anchorage Alaska WesternAlaskaFacilities@uscg.mil	1 electronic
Environmental Protection Agency	1 electronic

Facility Response Plan Cross-Reference – U.S. Environmental Protection Agency

U. S. ENVIRONMENTAL PROTECTION AGENCY FACILITY RESPONSE PLAN TABLE OF CONTENTS (40 CFR 112, APPENDIX F)	FACILITY RESPONSE PLAN LOCATION
1.1 Emergency Response Action Plan	Facility Response Plan (FRP) Section 1
1.2 Facility Information	FRP Section 2 and 9, Oil Discharge Prevention and Contingency Plan (CPLAN) Section 3.1
1.3 Emergency Response Information	
1.3.1 Notification	FRP Section 1.2 and 1.3, CPLAN Section 1.2
1.3.2 Response Equipment List	FRP Section 1.4, CPLAN Section 3.6.1
1.3.3 Response Equipment Testing/Deployment	FRP Section 1.5, CPLAN Section 3.6.3
1.3.4 Personnel	FRP Section 1, CPLAN Section 1.1 and 1.2
1.3.5 Evacuation Plans	FRP Section 1.7
1.3.6 Qualified Individual's Duties	FRP Section 1.1
1.4 Hazard Evaluation	
1.4.1 Hazard Identification	FRP Section 4.1
1.4.2 Vulnerability Analysis	FRP Section 4.2
1.4.3 Analysis of the Potential for an Oil Spill	FRP Section 4.3, CPLAN Section 2.3
1.4.4 Facility Reportable Oil Spill History	FRP Section 4.4, CPLAN Section 2.2
1.5 Discharge Scenarios	
1.5.1 Small and Medium Discharges	FRP Section 5.2
1.5.2 Worst-Case Discharge	FRP Section 5.1, CPLAN Section 1.6
1.6 Discharge Detection Systems	
1.6.1 Discharge Detection by Personnel	CPLAN Section 2.5
1.6.2 Automated Discharge Detection	CPLAN Section 2.1.6 and 2.5
1.7 Plan Implementation	
1.7.1 Response Resources	FRP Section 6.2
1.7.2 Disposal Plans	FRP Section 6.5
1.7.3 Containment and Drainage Planning	FRP Section 6.3
Response Personnel	FRP Sections 1.1, 1.2 and 1.6, CPLAN Sections 1.2 and 1.5.1
Disposal Plans	FRP Section 6.5, CPLAN Section 1.6.9

U. S. ENVIRONMENTAL PROTECTION AGENCY FACILITY RESPONSE PLAN TABLE OF CONTENTS (40 CFR 112, APPENDIX F)	FACILITY RESPONSE PLAN LOCATION
1.8 Self-Inspection, Drills/Exercises, and Response Training Programs	
1.8.1 Facility Self-Inspection	FRP Section 7.1
1.8.1.1 Tank Inspection	FRP Section 7.1
1.8.1.2 Response Equipment Inspection	FRP Section 1.5, CPLAN Section 3.6.3
1.8.1.3 Secondary Containment Inspection	FRP Section 7.1, CPLAN Sections 2.17 and 2.18
1.8.2 Facility Drills/Exercises	FRP Section 7.2, CPLAN Section 3.9
1.8.2.1 Qualified Individual Notification Drill Logs	FRP Section 7.2
1.8.2.2 Spill Management Team Tabletop Exercise Logs	FRP Section 7.2
1.8.3 Response Training	FRP Section 7.3, CPLAN Section 3.9
1.8.3.1 Personnel Response Training Logs	FRP Section 7.3, CPLAN Section 3.9
1.8.3.2 Discharge Prevention Meeting Logs	FRP Section 7.3, CPLAN Section 3.9
1.9 Diagrams	FRP Section 9, CPLAN Section 1.8
1.10 Security	FRP Section 8
2.0 Response Plan Cover Sheet	Front material of this section
3.0 Acronyms	FRP Page v, Front material of CPLAN
4.0 References	CPLAN Section 3.12

Facility Response Plan Cross-Reference – U.S. Coast Guard

USCG REGULATION SECTION (33 CFR 154)	SECTION TITLE	FACILITY RESPONSE PLAN OR CPLAN SECTION
1035(a)	Introduction, Plan Contents, and Cross Index	
(a)(1)	Facility name, address, telephone and fax numbers, mailing address	FRP Response Plan Cover Sheet, FRP Section 2, CPLAN Introduction
(a)(2)	Facility's geographic location	FRP Introduction, Section 2, Section 9 CPLAN Introduction, Section 1.8, Section 3.1
(a)(3)	24-hr procedure for contacting facility owner	FRP Sections 1.1 and 1.2, CPLAN Sections 1.1 and 1.2
(a)(4)	Table of Contents	FRP Page i
(a)(5)	Cross index	FRP Page xiii
(a)(6)	Record of Changes	FRP Page ROR-1
(b)	Emergency Response Action Plan	
(b)(1)	Notification procedures	
(b)(1)(i)(A)	List of response personnel (include QI)	FRP Sections 1.1 and 1.2, CPLAN Sections 1.2.1 and 1.2.2
(b)(1)(i)(B)	Government agencies	FRP Section 1.2, CPLAN Section 1.2.3
(b)(1)(ii)	Notification form	FRP Section 1.3, CPLAN Section 1.2.2
(b)(2)(i)(A)	Average most probable discharge	FRP Section 5.2
(b)(2)(i)(B)	Maximum most probable discharge	FRP Section 5.2
(b)(2)(i)(C)	Worst-case discharge	FRP Section 5.1
(b)(2)(i)(D)	Worst-case discharge from non-MTR portion	Not applicable
(b)(2)(ii)(A)	Failure of manifold, loading arm, hoses, other	FRP Section 4.3.1, CPLAN Sections 2.1.5, 2.1.8, Appendix B
(b)(2)(ii)(B)	Tank overfill	FRP Section 4.3.4 and 7, CPLAN Sections 2.1.6 and 2.1.7
(b)(2)(ii)(C)	Tank failure	FRP Section 4.3.2 and 7, CPLAN Sections 2.1.6 and 2.1.7
(b)(2)(ii)(D)	Piping rupture	NA
(b)(2)(ii)(E)	Piping leak	NA
(b)(2)(ii)(F)	Explosion or fire	FRP Section 5, CPLAN Sections 1.3 and 1.6
(b)(2)(ii)(G)	Equipment failure (e.g. pumping system failure, relief valve failure, or other general equipment relevant to operational activities associated with internal or external facility transfers.)	FRP Section 4.3.1
(b)(2)(iii)	List of equipment and responsibilities for mitigation of average most probable discharge	FRP Sections 1.4, 1.5, 1.6, 5.2.1, 6, CPLAN Sections 1 and 3.6

USCG REGULATION SECTION (33 CFR 154)	SECTION TITLE	FACILITY RESPONSE PLAN OR CPLAN SECTION
(b)(3)(i)	Facility's personnel responsibilities This subsection must contain a description of the facility personnel's responsibilities to initiate a response and supervise response resources pending the arrival of the qualified individual	FRP Sections 1.6, 1.8, and 5.1, CPLAN Section 1.1
(b)(3)(ii)	QI's responsibility and authorities	FRP Sections 1.1 and 1.6, CPLAN Sections 1.1 and 1.2
(b)(3)(iii)	Personnel to manage response actions	FRP Section 1.2, CPLAN Section 1.2
(b)(3)(iv)(A)	OSRO and spill management team capabilities	FRP Sections 1.6, 3, 5 and 6, CPLAN Introduction, Sections 1.5, 1.6, and Appendix C
(b)(3)(iv)(A)(1)	Provide equipment and supplies for the average most probable discharge	FRP Section 1.4, CPLAN Section 3.6
(b)(3)(iv)(A)(2)	Trained personnel for 7 days per week	FRP Sections 1.2 and 1.6, 5
(b)(4)(i)	Sensitive areas	FRP Section 4.2, CPLAN Section 3.10
(b)(4)(ii)	Worst-case discharge	
(b)(4)(ii)(A)	List of sensitive areas	FRP Section 4.2, CPLAN Section 3.10
(b)(4)(ii)(B)	Procedures to protect sensitive areas	FRP Sections 5, 6.1, and 6.3, CPLAN Section 1.6
(b)(4)(ii)(C)	Depict response actions on map	FRP Figure 5
(b)(4)(iii)(A)	Personnel and equipment to protect sensitive areas	FRP Sections 1.1, 1.2, 1.4, 5.1 and 6.2, CPLAN Sections 1.2.1, 1.2.2, and 3.6
(b)(4)(iii)(B)(1)(i)	Persistent oils discharged into non-tidal water – distance traveled	NA
(b)(4)(iii)(B)(1)(ii)	Persistent oils discharged into tidal waters – distance traveled	FRP Section 4.3
(b)(4)(iii)(B)(1)(iii)	Non-persistent oil discharged into non-tidal waters – distance traveled	NA
(b)(4)(iii)(B)(1)(iv)	Non-persistent oil discharged into tidal waters – distance traveled	FRP Section 4.3
(b)(4)(iii)(B)(2)	Trajectory Model	NA
(b)(4)(iii)(B)(3)	Distance spill reaches in 24 hrs at maximum current for discharge to non-tidal waters	NA
(b)(4)(iii)(C)	Additional areas	NA
(b)(5)	Disposal Plan	FRP Section 5, 6.5, CPLAN Section 1.6
(c)(1)	Training procedures	FRP Sections 7.3 and 7.5, CPLAN Section 3.9
(c)(2)	Drill procedures	FRP Sections 7.2 and 7.4, CPLAN Section 3.9
(d)	Plan review and update procedures	FRP Section 6.6
(e)(1)(i)	Physical description of facility	FRP Introduction, Section 2, 9, and Appendix A CPLAN Introduction, Sections 1.8, 3.1, and 3.6

USCG REGULATION SECTION (33 CFR 154)	SECTION TITLE	FACILITY RESPONSE PLAN OR CPLAN SECTION
(e)(1)(ii)	Vessels transferring at facility to <i>identify the sizes, types, and number of vessels that the facility can transfer oil to or from simultaneously.</i>	FRP Appendix E
(e)(1)(iii)	Location of first valve in secondary containment	NA
(e)(1)(iv)	Information on oil	FRP Section 2
(e)(2)(i)	24-hr contact for QI and alternate	FRP Sections 1.1 and 1.2, CPLAN Section 1.2.2
(e)(2)(ii)	24-hr contact for OSRO	FRP Sections 1.2 and 2, CPLAN Section 1.2.1
(e)(2)(iii)	24-hr contact for agencies	FRP Section 1.2, CPLAN Section 1.2.3
(e)(3)(i)	Equipment and personnel for average most probable discharge. A list of equipment and facility personnel required to respond to an average most probable discharge, as defined in §154.1020. The appendix must also list the location of the equipment.	FRP Sections 1.4, 1.5, 1.6, 5.2.1, 6, CPLAN Sections 1 and 3.6
(e)(3)(ii) and (iii)	Other equipment information	FRP Sections 1.4, 1.5 and 5, CPLAN Sections 1.6, 3.6, and 3.7
(e)(4)	Communications Plan	CPLAN Section 1.4 and 4.1
(e)(5)	Site-specific Health and Safety Plan	CPLAN Section 1.3
(e)(6)	List of acronyms and definitions	Page v

INTRODUCTION

This Northern Oilfield Solutions, LLC (Northern) Facility Response Plan (FRP) was prepared in compliance with Title 40 of the Code of Federal Regulations (CFR) Part 112 (40 CFR 112), Appendix F. Northern owns and operates the petroleum terminal located in Deadhorse, Alaska. The facility is located at Blocks 301 and 303, off Airport Way, adjacent to the Deadhorse airport. The facility stores bulk fuels and lube oils.

This plan references sections of the approved Alaska Department of Environmental Conservation (ADEC) Oil Discharge Prevention and Contingency Plan (CPLAN), which was submitted to the U.S. Environmental Protection Agency (EPA), and U.S. Coast Guard (CG).

This plan will be maintained and updated by Northern according to federal requirements.

According to *the Facility Response Planning Compliance Assistance Guide* (EPA 540-K-02-003d, August 2002), an FRP is a plan for responding, to the maximum extent practicable, to a worst-case discharge and to a substantial threat of such a discharge of oil. Therefore the purpose of an FRP is to:

- Develop a response organization and ensure the availability of response resources (equipment and personnel) needed to respond to an oil discharge;
- Demonstrate response resources are available in a timely manner;
- Help a facility improve discharge prevention measures through risk identification; and
- Aid local and regional response authorities to better understand the potential hazards and response capabilities in their area.

The Incident Command System (ICS) spill response organization is used throughout this plan. The ICS structure will be staffed in accordance with the spill size and/or complexity.

1. EMERGENCY RESPONSE ACTION PLAN

40 CFR 112.20(h)(1); 40 CFR 112 APP F, Section 1.1

The text and the subsections below comprise the Emergency Response Action Plan.

Below is a short checklist of the immediate response and notification steps that Northern employees will follow in the event of an oil discharge.

Safety Actions	<ul style="list-style-type: none">• Warn all persons in the immediate area, activate internal alarms.• Eliminate all sources of ignition, if safe to do so.• Determine safety requirements• Identify the character, exact source, amount, and extent of the release and other information needed for notification
Initiate Control and Containment	<ul style="list-style-type: none">• Stop the flow at the source• Transfer product out of damaged tank• Assess and implement prompt removal actions to contain and remove the oil• Deploy containment boom and response equipment• Construct a containment berm• Divert discharged oil to a collection area
Reporting and Notification Policy (see Section 1.2)	<ul style="list-style-type: none">• Notify immediate supervisor and Facility Manager• Notify facility response personnel as needed• Notify a QI• Contact agencies as applicable (QI normally completes this)
Transfer of Command	The Facility Manager acting as Initial On Scene Commander (IOSC) shall direct cleanup activities until relieved of this responsibility by an incoming Incident Commander (IC)

1.1 NOTIFICATION PROCEDURES

It is Northern's policy that all releases, regardless of size or location, are reported to the Facility Manager and the immediate supervisor of the individual who identifies the release. The Facility manager will then notify a QI who will make the appropriate notifications as defined in Section 1.1.2. An initial spill report form is also filled out by onsite personnel, as described in Section 1.1.4 and constitutes a basis for the information required to be collected in the event of a discharge.

Reporting is the required notification to governmental agencies of a discharge of oil as required by law. Reporting to agencies may be made within a reasonable time after initial knowledge of the discharge if the responsible party is engaged in initial spill response actions.

The initial notification to regulatory agencies must not be delayed pending collection of all information.

The Facility Manager or designee will make notification to:

- A Northern QI, as soon as the scene is secure
- 9-1-1, when people are at risk of injury, fire, or other hazards; and for over-all public welfare
- If a QI is not reached, the Facility Manager or designee shall notify agencies per the agency threshold table below
- Activate local response resources, if needed; the Northern QI will activate the Oil Spill Response Organization (OSRO), if needed
- Complete and submit an Initial Oil Spill Report Form, and other requested information, to the Northern QI

The Northern QI or alternate will:

- Make all agency notifications in accordance with the agency spill reporting table
- Make other agency notifications as applicable
- Complete and submit reporting documentation to applicable agencies
- Activate OSRO, if needed

Notification list of contacts for an oil spill, or the threat of an oil spill, is provided below. Wallet Cards containing Northern QI phone numbers are issued to all Northern oil handling personnel. For the purposes of this FRP, Northern considers each QI as both a QI and alternate QI (Alt. QI).

Name	Position	Office	Cell	Fax	Time
Facility Personnel:					
Tim Hunter	IOSC	use cell	907-359-1291	907-659-2289	
Sam Amato	Alt IOSC	use cell	907-202-1446	907-659-2289	
Mike Hannon / Brian Graves	Alt IOSC	use cell	907-943-1170	907-659-2289	
Name	Position	Office	Cell	Fax	Time
Northern QIs:					
Christina Bentz	QI / Alt QI	907-265-3836	907-331-8075	907-276-3741	
Wyatt Morgan	QI / Alt QI	907-265-3825	907-280-8038	206-213-0103	
Ryan Macnamara	QI / Alt QI	206-812-0116	425-753-1472	206-213-0103	
Name	Position	Office	Cell	Fax	Time
Other:					
Alaska Chadux Corporation	OSRO	907-348-2365	24-hour		
Witt/O'Brien's	IMT	985-781-0804	24-hour	985-781-0580	

The QI will notify applicable agencies in accordance with regulatory requirements:

Agency	Spill Size	Verbal Report	Number
Oil			
NRC (CG)	Any on or threatening water	Immediately	1-800-424-8802
NRC (EPA)	Any size on land but threatening or on surface waters (i.e., tundra, etc.)	Immediately	1-800-424-8802
ADEC	On water - any size	Immediately	907-451-2121 / 1-800-478-9300
ADEC	On land - over 55 gallons	Immediately	907-451-2121 / 1-800-478-9300
ADEC	On land - over 10 to 55 gallons	48 hours	907-451-2121 / 1-800-478-9300
ADEC	On land - 1 to 10 gallons	Monthly written report	907-451-2121 / 1-800-478-9300
ADEC	In lined SCA - over 55 gallons	48 hours	907-451-2121 / 1-800-478-9300
Hazardous Substance			
ADEC	Any size	Immediately	907-451-2121 / 1-800-478-9300
NRC (CG, EPA)	If reportable quantity is exceeded	Immediately	1-800-424-8802

Notes: ADEC after-hours contact: 1-800-478-9300

Document calls on an ICS 214 form or this page

Notifying local CG is not required but would be a courtesy call. **Call the NRC.**

1.2 EMERGENCY NOTIFICATION PHONE LIST

The emergency notification tables in this section provide the telephone numbers of individuals and organizations that may be contacted in the event of an oil spill.

TABLE 1. POTENTIAL EMERGENCY CONTACT LIST

OTHER SUPPORT	
<u>Spill Response Contractors</u>	
Alaska Chadux Corporation	(907) 348-2365; (888) 831-3438 (24-hour)
Alaska Clean Seas.....	(907) 659-2405 (24-hour)
ACS Operations Manager	(907) 659-3202
CCI, Inc.....	(907) 258-5755
.....	(907) 751-4363 (Emergency Response Number)
<u>Disposal Contractors</u>	
NRC (National Response Corporation Alaska)	(907) 258-1558

TABLE 2. AGENCY / COMMUNITY NOTIFICATION INFORMATION

AGENCY / COMMUNITY	PHONE	FAX
National Response Center (NRC)	(800) 424-8802 Direct (202) 267-2675	
EPA On Scene Coordinator	(907) 271-5038 / (800)424-4372	
NOAA/ National Weather Service (Deadhorse, AK)	(907) 659-2591	
Alaska State Fire Marshall's Office	(907) 269-5491	(907) 378-4375
State Emergency Response Commission	(907) 428-7042	
NSB Local Emergency Planning Committee (LEPC) and NSB Risk Management	(907) 852-0248	(907) 852-0356
NSB Police	(907) 852-6111 (24 hours on call)	(907) 852-0318
NSB Fire Reporting Center	(907) 659-5300	
ADF&G – Fairbanks (Wildlife Information Center)	907-459-7289	(907) 459-7303 (Habitat Division)
City of Barrow Inupiat Community of the Arctic Slope	(907) 852-5211 (907) 852-4227	

1.3 SPILL RESPONSE NOTIFICATION FORM

An initial spill report form is filled out by onsite personnel. A copy of the initial spill report form is provided on the following page. The initial spill report form is used to complete an agency-specific initial spill notification, if required. **The initial notification to regulatory agencies must not be delayed pending collection of all information.** The initial notification to regulatory agencies will typically be conducted by the QI, or Facility Manager, in the rare case a QI may not be reachable.

Northern personnel have been instructed that initial notifications must not be delayed pending collection of all information.

FIGURE 1. INITIAL SPILL REPORT FORM



INITIAL SPILL REPORT FORM

Person Reporting: _____		Company: _____	
Facility: _____		Incident Location: _____	
Date of Discharge	Time of Discharge	Product Released	Amount Released
Source of Discharge:		Surface Type:	
<input type="checkbox"/> Tank <input type="checkbox"/> Truck <input type="checkbox"/> Vessel <input type="checkbox"/> Pipeline <input type="checkbox"/> Other		<input type="checkbox"/> Gravel <input type="checkbox"/> Asphalt <input type="checkbox"/> Water <input type="checkbox"/> Containment	
Affected Area Size:	Estimated Amount of Recovered Product:	Estimated Amount and Type of Waste Generated:	
Circumstances that Caused the Discharge (Please Give Details):	Description of Cleanup Actions Taken/Proposed:	Description of Actions Taken to Prevent Recurrence of Discharge:	
<input type="checkbox"/> Equipment Failure <input type="checkbox"/> Unknown/Observed <input type="checkbox"/> Human Error			
Was a QI Notified?	Date Reported:	Time Reported:	
<input type="checkbox"/> Yes <input type="checkbox"/> No			
If a QI was notified, which QI was it reported to?	If a QI could not be reached, who made agency notifications?	Which agency was it reported to?	
		<input type="checkbox"/> ADEC <input type="checkbox"/> NRC <input type="checkbox"/> LOCAL	
Comments:			

Date: 12/13/2019

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Upon completion submit to Environmental Department.

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1.4 RESPONSE EQUIPMENT LIST AND LOCATION

A list of Northern equipment and rental equipment is located in the tables below. In addition, Northern has contracted with an OSRO, Chadux, that has an extensive inventory of response equipment. For a complete and up to date listing of equipment by location, see the Chadux website at the following address: <http://www.chadux.com/equipment>

TABLE 2. NORTHERN EQUIPMENT LISTS

CPLAN TABLE	EQUIPMENT LIST
Table 3-2	Spill Response Equipment
Table 3-4	Equipment Available for Purchase or Rent

1.5 RESPONSE EQUIPMENT TESTING AND DEPLOYMENT

Response equipment testing and deployment are discussed in the CPLAN in Section 3.6.

1.6 FACILITY RESPONSE TEAM

Northern employs the ICS management system for responding to a spill. Regardless of the spill conditions, once a spill is identified, the Supervisor directs initial spill response activities and assumes the role of Initial Incident Commander.

Upon contact, the Incident Commander will review the situation and assess whether onsite resources are capable of control, containment, and cleanup of the spill. The Incident Commander will activate the ICS as required.

Northern has contracted with Alaska Chadux Corporation. Alaska Chadux Corporation is classified as an OSRO by the U.S. Coast Guard (USCG), and registered as a primary response action contractor (PRAC) and a non-tank vessel cleanup contractor with the State of Alaska. In addition to response equipment, Alaska Chadux Corporation can provide incident management personnel, emergency response laborers, and wildlife hazing and capture personnel. Alaska Chadux Corporation also assists its members to prepare for spills by providing planning and training services.

The Incident Commander and/or QI have the authority to activate Alaska Chadux Corporation during a spill response.

The facility response team contact information is located in Table 1 and Table 2 of this plan.

1.7 EVACUATION PLAN

The senior person on site may call for an evacuation of the site if a condition is observed that he feels poses a significant threat to health or safety of onsite personnel. The notice to evacuate would be given over cell phones and/or a radio communications system. Upon notification, all onsite personnel should go directly to the designated assembly (Figure 4 of this FRP). Designated assembly points are:

- Primary Muster Area: Hangar.
- Secondary Muster Area: Prudhoe Bay Hotel.

If a community or individual resident is immediately threatened by the oil spill, Northern will contact the local public safety organization or the Alaska State Troopers to assist in notification and evacuation, if necessary. Northern will take whatever actions are required to protect the health and safety of the general public.

1.8 IMMEDIATE ACTIONS

A description of immediate measures to secure the spill source and to provide adequate containment and drainage of discharged oil is provided in Table 1-2 and Section 1.1.4 of the CPLAN.

1.9 FACILITY DIAGRAMS

Facility diagrams are presented in Section 9 of this FRP. Additional facility diagrams are provided in Section 1.8 of the CPLAN.

2. FACILITY INFORMATION

40 CFR 112.20(h)(2); 40 CFR 112 APP F, Section 1.2

The facility is described in the CPLAN in Section 3.1.

Name: Northern Oilfield Solutions Complex

Physical Address: Lot 2B, Block 301 and Lots 1 and 6, Block 303
Deadhorse, Alaska

Type: Onshore Bulk and Temporary Storage

Date of Initial Operations: 1975

Date of Major Facility Change:

Late 2011 – Installed six new tanks with a capacity of 203,596 gallons each, for storage of diesel.

June 2012 – New tanks begin to receive diesel.

2012 – Fueling station upgraded.

2015 – Tank truck loading and unloading upgrades at Block 301 and Block 303.

The complex includes tanks on both Blocks 301 and 303. The combined volume of all oil-filled containers with capacities of 55 gallons or greater is approximately 1,423,748 gallons.

Block 303 currently has:

- Seven aboveground storage tanks (ASTs) for storage of diesel, unleaded gas, Jet B, JP4, AV Gas (Block 303 Bulk Tank Farm) and methanol.
- A tank truck loading and unloading area.

Block 301 currently has:

- Two tanks, one designated for ultra-low sulfur diesel and one designated for unleaded gasoline at the self-serve vehicle fueling station.
- A shop/warehouse building with varying numbers of totes, drums, pails, and cases of motor oil.
- A new warehouse building with a used oil tank, vehicle maintenance lubricant containment, and numerous drums and totes, pails and cases.
- Six bulk storage tanks containing diesel fuel (Block 301 Tank Farm).
- A tank truck loading and unloading area.

A complete list of oil-filled containers is located in Appendix A. Tanks are located on the facility figures included in Section 9 of this FRP. If other tanks or containers 55 gallons or greater are purchased as permanent storage containers, this FRP should be revised within six months of placing the containers in service.

3. EMERGENCY RESPONSE INFORMATION

40 CFR 112.20(h)(3); 40 CFR 112 APP F, Section 1.3

Northern has contracted with Alaska Chadux Corporation who will assist with response operations. The Alaska Chadux Corporation main contact phone is 907-348-2365. Refer to Section 1 of this plan for additional emergency response information.

The Northern Incident Command Center may be located in Anchorage, Deadhorse, or Seattle depending on the complexity of the response. The exact location of the command center will vary based on the incident and could involve virtual resources, as needed.

Safety Data Sheets (SDS) are kept in the *Mobile Facility Fuel Transfer Manuals* that go in each tank truck.

4. HAZARD EVALUATION

40 CFR 112.20(h)(4); 40 CFR 112 APP F, Section 1.4

4.1 HAZARD IDENTIFICATION

There have been no tank failures at the facility. Fuel throughput at the retail station ranges from 1,000 gallons to 2,500 gallons per day with an average of 1,800 gallons per day. Fuel throughput at the tank farm ranges from 15,000 gallons to 30,000 gallons per day on average per year. A list of tanks and other containers 55 gallons and greater is included as Appendix A. A list of surface impoundments is provided in the table below.

TABLE 3. HAZARD IDENTIFICATION SURFACE IMPOUNDMENTS

SURFACE IMPOUNDMENT NAME	SUBSTANCE STORED	LARGEST QUANTITY STORED	SURFACE AREA	NET MAXIMUM CAPACITY	FAILURE/CAUSE
Warehouses	Lubricants	330 gallons	2 sumps at 4.5 sq ft each, plus sloped floor	330 gallons	None
New Warehouse (Tanks 5-1 through 5-3)	Used oil, motor oil	330 gallons	2 sumps at 4.5 sq ft each, plus sloped floor	330 gallons	None
Old Warehouse (Totes)	Bulk oil lubricants	21,450 gallons	1,100 sq ft	21,450 gallons	None
Block 301 Containment (Tanks 1 through 6)	Diesels	203,596 gallons	19,404 sq ft	345,200 gallons	None
Block 303 Containment (Tanks 7 through 12)	Diesels, Jet A, and Jet B	20,029 gallons	4,000 sq ft	65,406 gallons	None

4.2 VULNERABILITY ANALYSIS

The vulnerability analysis addresses the potential effects to human health, property, or the environment of an oil discharge. A vulnerability analysis is presented in Section 2.3 of the CPLAN. Additional information is presented below.

TABLE 4. VULNERABILITY ANALYSIS

VULNERABILITY	ANALYSIS
Water intakes	The North Slope Borough has a holding pond from which potable water is withdrawn and provided to businesses in Deadhorse. The holding pond is located approximately 1.6 miles from the Northern facility.
Schools	There are no schools in the project area.
Medical Facilities	The Deadhorse Aviation Center medical facility operated by Fairweather's medical personnel; and, Beacon has a medical facility available for use.
Residential Areas	There are no public residences in the project area. Deadhorse is an industrial community that includes several camps with significant worker populations.
Businesses	Businesses located near the area are associated with the Deadhorse airport or are associated with oil field support.
Sensitive Environments Fish and Wildlife Lakes and Streams Endangered Flora and Fauna	Wetlands are adjacent to the project area.
Transportation Routes	The facility is located near the Deadhorse airport. Keeping airport access open will be a priority during a spill response.
Utilities	Norgasco operates a natural gas distribution system in Deadhorse and is located over 1 mile from the facility. TDX provides electrical power to Deadhorse and is located adjacent to the Northern facility. ASTAC provides phone service for Deadhorse and is located two lots to the east of the Northern facility. Protection of utility facilities will be a priority during a spill.
Other Areas of Economic Importance	A spill could affect areas used by subsistence hunting.

4.3 ANALYSIS OF THE POTENTIAL FOR AN OIL SPILL

Events that pose a potential risk of an oil discharge at the facility are described in this section.

4.3.1 Fuel Transfer

Fuel transfers occur from fuel trucks to the bulk storage tanks at the facility and from the bulk storage tanks to tanker trucks. A failure or malfunction in the fuel transfer within one of the fuel loading/unloading lined containments would result in a rapid rate of flow into containment. A failure in the fuel transfer from a fuel truck into one of the small tanks, which does not have secondary containment for the fuel truck, would result in a rapid rate of flow onto the gravel pad. Marine fuel transfers occurring from tank trucks to vessels are via hoses, and therefore do not pose a hazard from piping rupture. *Mobile Facility Fuel Transfer Manuals* are kept with each fuel truck and include SDSs.

Fuel transfers are monitored by facility personnel at all times, and response to an oil discharge would be rapid. Response procedures would limit the amount of the discharge to less than approximately 100 gallons. The probability of this spill type is low, and the environmental risk is low.

4.3.2 Fixed Bulk Storage Tank Rupture

Bulk tanks are located within lined dikes sized to contain at least 110 percent of the largest tank. A catastrophic failure of one of the fixed tanks would result in a large-volume spill that would be contained by the diked area. It is unlikely that any of this discharge would migrate off the property prior to containment. The probability of this spill type is very low, and the environmental risk is high.

4.3.3 Portable Drum/Tote Rupture

Drums and totes are placed within containment when not in transport. If a rupture were to occur during container transport, the spill would flow onto the gravel pad. If the container was in transport far from the edge of the pad at the time of rupture, the spill most likely would be contained on the pad. If the container was in transport near the edge of the pad at the time of rupture, it is possible oil would flow onto the tundra. To prevent such a discharge, drums are not stored on the edge of the gravel pads. The probability of this spill type is low, and the environmental risk is moderately low.

4.3.4 Tank Overfill

Fuel transfers are monitored by facility personnel at all times, and response to an oil discharge would be rapid. *Mobile Facility Fuel Transfer Manuals* are kept with each fuel truck. Spill response equipment is pre-staged at the facility in order to mitigate environmental impacts from spills and to provide a timely response to spills. The probability of this spill type is low, and the environmental risk is low.

4.3.5 Horizontal Range of a Potential Oil Spill

If the largest storage tank failed and the secondary containment failed as well, diesel would discharge and flow across the nearly flat topography toward wetlands.

4.3.6 Vulnerability of Facility to Natural Disaster

Inclement weather may increase the risk of spills. High winds and snows or sleet could cause operator errors, slips, or freezing valves. Environmental and safety considerations potentially impacting a spill response are primarily weather related and include:

- Cold temperatures,
- Limited daylight, and
- Restricted visibility due to wind blowing snow.

4.3.7 Tank Age

The large bulk storage tanks are fairly new. The smaller tanks are 10 to 40 years old. The tanks are inspected by an American Petroleum Institute (API) or Steel Tank Institute (STI)-certified inspector as appropriate to the tank standard, and repairs are made as required.

4.4 FACILITY REPORTABLE OIL SPILL HISTORY

A spill is defined in 40 CFR 110.3 reportable oil spills are those that:

- (a) violate applicable water quality standards, or
- (b) cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.

There have not been any EPA-reportable spills at the facility.

5. DISCHARGE SCENARIOS

40 CFR 112.20(h)(5); 40 CFR 112 APP F, Section 1.5

Discharge scenarios are described in this section. Pursuant to regulations found in 40 CFR 112 Appendix F, resources capable of responding to tiered spills must arrive within specified time periods, as outlined in Table 7.

According to 33 CFR 154.1035(b)(2)(i), the plan must include volumes and oil groups that would be involved in the average most probable discharge from the marine transfer related (MTR) facility; maximum most probable discharge from the MTR facility; and the worst-case discharge from the MTR facility.

The worst-case discharge from Northern's mobile facilities would be 10,000 gallons (if Northern's largest tanker truck was to be used for transferring fuel). Since the worst-case discharge from the MTR facilities is less than the worst-case discharge for a catastrophic tank failure as described below, that scenario is used to meet the CG requirements as it provides a more conservative measure for response operations, including prioritized procedures for facility personnel. Marine transfers are from truck to vessel via hoses, and therefore are not considered a piping rupture hazard. Fire Prevention, Control and Safety are described in Table 8 and Table 13.

Average probable and most probable discharges are described in Section 5.2. Vessel information is provided in Appendix E.

5.1 WORST-CASE DISCHARGE

Appendix B includes worksheets found in EPA 40 CFR 112, Appendix F that are used to calculate the worst-case discharge (WCD) volume and the planning volume for response resources for the WCD.

WCD: 203,596 gallons

On-Water Oil Recovery Volume: 20,370 gallons

Shoreline Recovery Volume: 20,370 gallons

TABLE 5. TIER TIME FOR RESOURCES TO ARRIVE AT SPILL

	TIER 1	TIER 2	TIER 3
Time:	12 hours	36 hours	60 hours
Recovery Capacity:	6,132 gallons	8,148 gallons	12,222 gallons

Description of Event: A complete tank failure occurs at Tank 5, resulting in a 203,596-gallon spill of diesel on July 17. Approximately 80 percent of the spill is contained or dissipates. The remaining 40,740 gallons of diesel spills on tundra and wetlands.

TABLE 6. WORST-CASE DISCHARGE SCENARIO TIMELINE MATRIX

REGULATORY/RESPONSE AREA	INITIAL ACTIONS – HOUR 0-1 DAY 1 (0800-0900)	HOUR 1-9 DAY 1 (0900-1700)	HOUR 10-11 DAY 1 (1800-1900)	NIGHT SHIFT
Situation/Status <ul style="list-style-type: none"> Weather Environmental 	60 degrees Fahrenheit (°F) The predominant wind directions are from the ENE and then E at 10 knots. The entire content of Tank 5 is lost, and 203,596 gallons spills.	Diesel flows across the gravel pad and into wetlands on the north and west of the pad. Approximately 80 percent of the spill is contained in the impoundment or dissipates. Approximately 20,370 gallons of diesel is along the edge of the pad and on tundra. Approximately 20,370 gallons flows into wetlands/surface.		
Objectives and Strategies	Objectives	Strategies		
	Site security: safety, site control, surveillance.	Control site access, evacuate nonessential personnel, review initial safety assessment, develop site safety plan, and develop and implement leading edge tracking.		
	Cleanup and countermeasures on land.	Investigate cause; stop source if safe. Contain on land if possible.		
	Cleanup and countermeasures on water.	Deploy task forces; mobilize resources to maximize containment and recovery. Initiate free oil recovery beyond primary containment areas. Track oil movement.		
	Protection of sensitive resources and wildlife.	Initiate identification of environmentally sensitive areas (ESAs).		
	Stakeholder communications and engagement.	The following state and federal agencies are notified by the QI: NRC and EPA/USCG.		

TABLE 8 (CONTINUED). WORST-CASE DISCHARGE SCENARIO TIMELINE MATRIX

REGULATORY/RESPONSE AREA	INITIAL ACTIONS – HOUR 0-1 DAY 1 (0800-0900)	HOUR 1-9 DAY 1 (0900-1700)	HOUR 10-11 DAY 1 (1800-1900)	NIGHT SHIFT
Fire Prevention, Control, and Safety	The Safety Officer completes an initial site safety assessment. The information is radioed to the Incident Commander and is used to verify that all responders have appropriate PPE before entering the spill site.	Safety: Safety Officer conducts a site safety analysis using the “Site Safety and Control Analysis” (Form ICS 201-5) to provide identification of potential hazards, PPE requirements, and establishment of decontamination. Throughout the first few hours of the spill, the Safety Officer verifies sources of ignition are shut down or removed from the area. Access to the spill site is carefully controlled, and the scene is secured. The Safety Officer provides access zone information and determines PPE requirements. Monitoring protocol is established by the Site Safety Officer for work areas to ensure personnel protection. The monitoring protocol establishes safety zones according to applicable Occupational Safety and Health Administration (OSHA) and fire hazard standards, based on current weather conditions and forecasts. Containment and recovery operations are allowed without respiratory protection in areas where safety criteria are met. Recovery operations and traffic are disallowed downwind of the tank spill in oiled areas where workers may become exposed to flash fire hazard or diesel at concentrations in excess of permissible exposure limits (PELs). Decontamination will be set up at the spill site. Fire: All necessary precautions are taken to ensure the risk of fire is minimized. Work activities are controlled depending on the lower explosive limit (LEL). If LEL exceeds 10 percent, additional fire and safety precautions are initiated to eliminate ignition sources. These include, but are not limited to, use of non-sparking or intrinsically safe equipment and elimination of open flames.		
Discharge Tracking		The tracking of spilled oil is intended to provide both tactical and strategic information to the responders. Tracking is done on the ground by containment and recovery operations personnel who establish the extent of spread of the spilled oil. The extent of the diesel release is marked with stakes on the pad and on tundra. The stakes are checked every hour for the first 24 hours of the spill to determine if the spill is spreading. The Incident Commander tracks the discharge on a situation status map. Tracking reports will be made to the Incident Command Center via radio on an hourly basis at a minimum.		
Protection of Environmentally Sensitive Areas (ESAs)	Diesel spills to the gravel pad and flows onto the surrounding tundra. The response team consults the Alaska Regional Response Team (RRT) <i>North Slope Area Contingency Plan (ACP)</i> list of areas of major concern. No priority sites lie within the spill area per the ACP and Map No. 81 in the Alaska Clean Seas (ACS) <i>Technical Manual</i> , Volume 2, Map Atlas. The On-Scene Incident Commander identifies the priority objective as containment of diesel to the smallest footprint practicable.			

TABLE 8 (CONTINUED). WORST-CASE DISCHARGE SCENARIO TIMELINE MATRIX

REGULATORY/RESPONSE AREA	INITIAL ACTIONS – HOUR 0-1 DAY 1 (0800-0900)	HOUR 1-9 DAY 1 (0900-1700)	HOUR 10-11 DAY 1 (1800-1900)	NIGHT SHIFT
<p>Initial Response Actions and Stopping Discharge at Source</p>	<p>The immediate objective is to stabilize the weakened area of the secondary containment and prevent further escape of oil. The Spill Response Team (SRT) is activated. All notifications are made to proper personnel and agencies. A plant operator requests lines flowing into the tank be closed. The tank shut-in procedure is evaluated to ensure possible sources have been secured.</p> <p>Operations Chief receives report from operator of a total tank failure and partial secondary containment failure.</p> <p>The Incident Commander requests the Safety Officer to complete an initial assessment of the spill and an initial site safety assessment as described above. This is completed by T + 1 hour.</p> <p>The Northern response personnel are activated. The first Northern responders arrive at the spill site at T+1 hour. Chadux personnel are activated and begin deployment.</p>	<p>Incident Commander conducts notifications per Section 1.2. Federal and state agencies are notified (ADEC, NRC).</p> <p>Containment and recovery task force personnel submit tracking reports to the Incident Command Center on an hourly basis.</p> <p>The Command Post is set up in the Northern office.</p>	<p>Additional Northern personnel, Chadux personnel, and equipment arrive on site at T + 10.5.</p>	
<p>Staging Areas Mobilization</p>	<p>Staging area is established at Block 303 of the Northern property. Personnel and equipment are mobilized to the staging area at times noted in the resource table (Table 10).</p>			
<p>Response Actions Task Force 1 (TF-1) (Recovery)</p>	<p>A 2-person response crew is mobilized with a trash pump, hoses, and tank.</p>	<p>Response crew arrives with recovery equipment by T + 1 hr. TF-1 utilizes a pump to pump free oil from the secondary containment area and from depressions in the pad and tundra. The recovered free liquid is transported to an approved facility.</p>		
<p>Response Actions Task Force 2 (TF-2) (Containment and Recovery)</p>	<p>Two 1-person response teams are mobilized with loaders.</p>	<p>In order to contain diesel that releases from the tank, gravel berms are built around the perimeter of the release on the pad.</p>	<p>The berm is shored up on an ongoing basis, as needed.</p> <p>TF-2 utilizes a loader or equivalent to recover oiled gravel on the pad. Oiled gravel is placed on a bermed liner and covered. The gravel will then be classified and properly disposed of.</p>	

TABLE 8 (CONTINUED). WORST-CASE DISCHARGE SCENARIO TIMELINE MATRIX

REGULATORY/RESPONSE AREA	INITIAL ACTIONS – HOUR 0-1 DAY 1 (0800-0900)	HOUR 1-9 DAY 1 (0900-1700)	HOUR 10-11 DAY 1 (1800-1900)	NIGHT SHIFT
Response Actions Task Force 3 (TF-3) (Recovery)			<p>A 5-person response team is mobilized with shovels.</p> <p>TF-3 utilizes manual methods to remove oiled gravel in areas with limited access and to use absorbents to remove diesel from the tundra. Onsite personnel recover oiled gravel with shovels. Oiled gravel is placed on a bermed liner and covered. The gravel will then be classified and properly disposed of.</p>	
Response Actions Task Force 4 (TF-4) (Containment)			<p>A 5-person response team is mobilized with absorbent pads and rolls.</p> <p>Absorbent pads are wound through tundra at the furthest extent of the diesel plume (where fuel is too thin to pump). Within three hours, portions of the pad and adjacent tundra are enclosed within the berm and boom. The absorbent pads are replaced as they become saturated.</p> <p>Chadux personnel arrive at T + 10.5 hrs with containment boom and deploy it on the surface water north and west of the pad to contain the oil and prevent wind migration. The boom is pulled slowly inland to pool the oil in a thickness feasible for skimming.</p>	
Response Actions Task Force 5 (TF-5) (Recovery)			<p>The Chadux response team arrives at T + 10.5 hrs with a Lamor 30 brush skimmer, pumps, hoses, Fastanks, and additional absorbents.</p> <p>Skim contained free diesel and pump into tanks.</p> <p>Using pumps and hoses, vacuum diesel off from tundra.</p> <p>Cover tundra with absorbents and replace as needed over next 12 hours.</p>	

TABLE 8 (CONTINUED). WORST-CASE DISCHARGE SCENARIO TIMELINE MATRIX

REGULATORY/RESPONSE AREA	INITIAL ACTIONS – HOUR 0-1 DAY 1 (0800-0900)	HOUR 1-9 DAY 1 (0900-1700)	HOUR 10-11 DAY 1 (1800-1900)	NIGHT SHIFT
Plans, Procedures, and Locations for Temporary Storage and Disposal			Oiled gravel is placed on a liner and covered. Recovered liquids are stored in empty tanks. Recovered liquids and oiled gravel are hauled to an approved facility for processing. Non-liquid oily wastes are classified and disposed of according to classification. Contaminated soil is managed per the waste management plan approved by ADEC.	
Transfer and Storage of Recovered Oil; Volume Estimating Procedure		Recovered fluids are temporarily stored in empty tanks. Recovered liquids are gauged, manifested, and transported for disposal or recycling, as appropriate. If recovered liquids are sent to an injection disposal well, they are measured at the disposal facility. Disposal or recycling occurs at an approved processing center.		
Wildlife Protection/ Rehabilitation	The spill is contained to the pad and wetlands. Responders are working in wetlands for the first 24 to 48 hours, and their presence acts as a natural deterrent for birds. A wildlife protection plan is developed for hazing birds in the immediate work area on the tundra.			

REGULATORY/RESPONSE AREA	DAY 2 – 3
Response Actions Task Force 2 (TF-2) (Recovery)	<p>TF-2 utilizes a loader or equivalent to recover oiled gravel on the pad.</p>
Response Actions Task Force 3 (TF-3) (Recovery)	<p>TF-3 utilizes manual methods to remove oiled gravel in areas with limited access and to use absorbents to remove diesel from the tundra. Onsite personnel recover oiled gravel with shovels. Oiled gravel is placed on a bermed liner and covered. The gravel will then be classified and properly disposed of.</p>
Response Actions Task Force 5 (TF-5) (Recovery)	<p>TF-5 continues recovering diesel from wetlands by using skimmers and absorbents.</p>

TABLE 8 (CONTINUED). WORST-CASE DISCHARGE SCENARIO TIMELINE MATRIX

Contaminated Soil Cleanup	<p>Once the spill is contained, the response turns into a contaminated soil cleanup operation. Assuming the top 2 inches of gravel pad are removed during cleanup, approximately 38,000 cubic yards of contaminated gravel are generated.</p> <p>Clean up of the tundra continues with absorbents until diesel is no longer observed. After each rain event during the summer, cleanup crews are dispatched to remove diesel floating on ponded water on the tundra. If needed, the top few inches of tundra can be excavated and disposed, although the priority will be to save as much tundra vegetation as practicable, without leaving a source of contamination for birds and other wildlife. The final cleanup plan will be discussed with applicable state and federal agencies prior to implementation.</p>
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TABLE 7. RESOURCE MOBILIZATION

EQUIPMENT/PERSONNEL (QUANTITY)	LOCATION	PURPOSE	ETA ON SITE
1 Loaders and/or graders	Northern	Construct berm; recover contaminated gravel	T + 0.5 hr
Loaders and/or graders (>100 available through North Slope vendors)	Alaska Frontier Constructors or Cruz Construction Inc	Construct berm; recover contaminated gravel	T + 2.5 hr
Fuel truck with pump	Northern	Diesel recovery and transfer Fuel truck capacities: <ul style="list-style-type: none"> • one at 6,500 gallons, • two at 4,500 gallons, and • three at 2,800 gallons Total capacity: 23,900 gallons	T + 0.5 hr
Crew cab trucks (2)	Northern	Transport	T + 0.5 hr
Trash pump, plus hoses	Northern	Diesel recovery and transfer	T + 0.5 hr
Tank	Northern	Temporary storage	T + 0.5 hr
2-person response crew (TF-1)	Northern	Labor	T + 0.5 hr
2-person response crew (TF-2)	Northern	Labor	T + 0.5 hr
5-person response crew (TF-3)	Northern	Labor	T + 10.5 hr
5-person response crew (TF-4)	Northern + Chadux	Labor	T + 10.5 hr (Northern) T + 10.5 hr (Chadux)
Absorbents	Northern	Containment and recovery on tundra	T + 1 hr
Shovels	Northern	Recovery on pad	T + 1 hr
Stakes and flags	Northern	Delineation of contamination	T + 1 hr
Bags	Northern	Absorbent disposal and PPE disposal	T + 1 hr
Commercial poly	Northern	Liner for temporary storage	T + 1 hr
Additional absorbents	Chadux	Containment and recovery on tundra	T + 10.5 hr
Skimmer, pumps, hoses, Fastanks, containment boom	Chadux	Containment and recovery	T + 10.5 hr
10-person response crew (TF-5)	Northern + Chadux	Labor	T + 10.5 hr (Chadux)
2-person response crew (TF-1 night shift)	Northern	Labor	T + 10 hr
2-person response crew (TF-2 night shift)	Northern	Labor	T + 10 hr
5-person response crew (TF-3 night shift)	Chadux	Labor	T + 10.5 hr
5-person response crew (TF-4 night shift)	Chadux	Labor	T + 10.5 hr

TABLE 8. WORST-CASE DISCHARGE EQUIPMENT AND RECOVERY

TASK FORCE	NUMBER OF SYSTEMS	RECOVERY / CONTAINMENT SYSTEM	RECOVERY RATE (GALLONS/HR)	MOBILIZATION AND TRANSIT TIME TO SITE¹	OPERATING TIME	RECOVERY
TF-1 Recovery	1	Pump/hose	9,000 ²	3 hours	2.5 hours	Over 22,500 gallons
TF-2 Containment and Recovery	2	Front-end loader or grader	500 ³	0.5 hour	36 hours	Up to 18,000 gallons
TF-3 Recovery	2	Manual recovery with shovels	20	10.5 hours	48 hours	Up to 960 gallons
TF-4 Recovery	2	Absorbent pads and rolls on tundra	20	10.5 hours	72 hours	Up to 1,440 gallons
TF-5	1	Lamor 30 brush skimmer	2,604	10.5 hours	48 hours	Over 20,370 gallons

¹ The mobilization time includes the time required to initiate safety protocols and prepare equipment for recovery operations.

² Liquid recovery rate is based on a pump recovery rate of 9,000 gallons/hour derated.

³ Denotes mechanical recovery of oiled gravel by loader with a bucket capacity of 500 gallons.

5.2 SMALL AND MEDIUM DISCHARGES

According to 40 CFR 112 Appendix E, a facility owner or operator shall identify sufficient response resources available to respond to small and medium discharges. A small discharge is defined as any discharge volume less than or equal to 2,100 gallons, but not to exceed the calculated WCD. EPA's "small discharge" is 2,100 gallons, or 1 percent of the volume of the worst-case discharge WCD, whichever is less. A medium discharge is defined as any discharge volume less than or equal to 36,000 gallons of oil, or 10 percent of the WCD, whichever is less. Small and medium discharge volumes are presented below.

According to 33 CFR 154.1035(b)(2)(i), the plan must include volumes and oil groups that would be involved in the average most discharge from the MTR facility; maximum most probable discharge from the MTR facility; and the worst-case discharge from the MTR facility. The worst-case discharge from Northern's mobile facilities is described above. Average most probable and maximum most probable discharges under the USCG would be 1 percent (100 gallons), and 10 percent (1,000 gallons), respectively. Vessel information is described in Appendix E.

Small Discharge/Average Most Probable = 203,596 gallons x 1 percent = 2,036 gallons

Medium Discharge/Maximum Most Probable = 203,596 gallons x 10 percent = 20,360 gallons

6. PLAN IMPLEMENTATION

40 CFR 112.20(h)(7); 40 CFR 112 APP F, Section 1.7

This section describes in detail response actions to be carried out under the plan to ensure the safety of the facility and to mitigate or prevent discharges. This section includes:

- Initial response actions and priorities;
- Identification of response resources for small and medium spills, and WCDs;
- Containment and drainage planning;
- List of those personnel who would be involved in the cleanup;
- Disposal plans; and
- Procedures to update the plan after an oil discharge event and the time frame to update the plan.

6.1 RESPONSE PROCEDURES

The primary objectives of a spill response are outlined in Table 11. Checklists of ICS position duties are found in the CPLAN in Section 1.1.

TABLE 9. RESPONSE PROCEDURES

STEP	GOAL	RESPONSE
1	Safety	Assess scene for safety prior to initiating any action. Do not enter area unless it is safe. All trucks are equipped with an ABC fire extinguisher located in the side compartment, with an extra extinguisher in the truck cab.
2	Stop Ignition Sources and Product Flow	If safe, turn off sources of ignition. Turn off pumps and machinery; shut off all drains and valves.
3	Notify Supervisor	Supervisor or terminal manager will assess situation, make necessary agency notifications, and arrange for spill cleanup.
4	Isolate Area	Isolate area if possible or if needed to prevent entry for safety reasons.
5	Control, Containment and Clean-up	Initiate standard spill response procedures (absorbents, shovels, berms, booms).
6	Protect	Protect environmentally sensitive areas.
7	Spill Record	Record location, quantity, type of oil, and action taken in a spill log.
8	Notification	Complete required notification.

ADEC developed Geographic Response Strategies to protect sensitive coastal environments. These response strategies show responders where sensitive areas are located and where to place oil spill protection resources.

An Area contingency plan is available for Arctic & Western Alaska at:

<https://dec.alaska.gov/spar/ppr/contingency-plans/response-plans/Response> strategies are described in detail in Section 1.6 of the CPLAN.

6.2 RESPONSE RESOURCES

The facility has spill control equipment ready and available to respond. Equipment is listed in the CPLAN in Section 3.6. Northern has the available response resources, either by ownership or through contract, to fulfill the requirements listed above for small and medium spills, and WCDs.

Guidelines for identification of response resources for small and medium spills, and WCDs, are provided in 40 CFR 112 Appendix E. Based on the guidelines provided in Appendix E, response resources required for a small discharge (less than or equal to 2,100 gallons) shall, as appropriate, include:

- 1,000 feet of containment boom (not sorbent boom);
- Capability of deploying boom within 1 hour of the discovery of a small discharge;
- Oil recovery devices with an effective daily recovery capacity equal to the amount of the oil discharged in a small discharge or greater;
- Response equipment is available at the facility within 2 hours of the detection of a small discharge; and
- Availability of temporary storage capacity equal to twice the volume of the small discharge.

Response resources required for a medium discharge must include:

- Availability of sufficient quantities of boom for containment and for protection of sensitive areas;
- Oil recovery devices with an effective daily recovery capacity equal to 50 percent of the total volume of the medium discharge;
- Equipment arrival times within 12 hours; and
- Availability of temporary storage capacity equal to the volume of the medium discharge.

Response resources required for a WCD must include:

- Availability of sufficient quantities of boom for containment and for protection of fish, wildlife, and sensitive environments;
- Identification of response resources with firefighting capabilities;

- Identification of an individual located at the facility to work with the fire department;
- Identification of response resources to meet the applicable WCD planning volume and capable of arriving at the scene of a WCD within the applicable response tiers;
- For facilities required to plan for response in shallow water, at least 20 percent of the on-water response equipment shall, as appropriate, be capable of operating in water of 6 feet or less; and
- Availability of temporary storage capacity equal to twice the response equipment's daily recovery capacity.

Northern has the available response resources, either by ownership or through contract, to fulfill the requirements listed above for small and medium spills, and WCDs.

6.3 CONTAINMENT AND DRAINAGE PLANNING

Northern plans to contain and control a spill through drainage to limit threat to human health and the environment, as described below.

- Available volume of containment. All tanks have a minimum of 100 percent secondary containment plus room for precipitation.
- Route of drainage from oil storage transfer area. The tank truck loading areas are sloped toward sumps so that small spills are contained.
- Sump and pump capacities. Sumps have the capacity required for secondary containment.

TABLE 10. CONTAINMENT PROCEDURES

STEP	GOAL	RESPONSE
1	Prevent spread	Barricade the spill area from public and vehicle use. Berm area with soils or snow at the leading edge of the flow. Construct intercept trenches or ditches across migration path. Use booms or other absorbent material to intercept flow. If rainfall is a major concern, divert runoff from the contaminated area.
2	Clean up	Use oil absorbent material to clean up the spilled oil. Pump pooled oil into temporary storage containers. Bring in specialized equipment as needed (vacuum trucks, etc.).
3	Control contamination	Place discharge debris in properly labeled waste containers. Remove contaminated soils and place in containers for proper disposal. Sample site for contamination prior to backfilling excavation.

6.4 RESPONSE PERSONNEL LIST

Personnel that may be involved in a spill response are listed in Tables 1 and 2 of this plan.

6.5 DISPOSAL PLANS

Temporary storage and final disposal is described in Section 1.6.9 of the CPLAN.

If approved by the regulatory agencies, water from oil/water mixtures will be decanted to reduce the volumes of liquid wastes. This will be accomplished either with the facility's own oil/water separators or by contractors equipped with oil/water separators.

A temporary storage site will be used to stage oily waste. A solid waste disposal permit will be requested from ADEC, as necessary. Final disposition of the waste will be described in an approved waste disposal plan.

Waste disposal facilities are listed in Table 13.

TABLE 11. DISPOSAL FACILITIES

COMPANY	LOCATION	PHONE
NRC – (National Response Corporation Alaska)	Anchorage, AK	907-258-1558
Organic Incineration Technology, Inc. (OIT)	North Pole, AK	907-488-4899 (Main Office)
Waste Management National Services, Inc.	Anchorage, AK	907-274-0477
	Prudhoe Bay, AK	907-659-9848

6.6 PLAN AMENDMENT PROCEDURES

Northern will review the FRP annually and within 60 days after completing cleanup of a spill, as defined in 40 CFR 112.4, to evaluate the effectiveness of the plans. Northern will revise the FRP within 60 days of each facility change that materially may affect the response to a WCD, including:

- A change in the facility's configuration that materially alters the information included in the FRP;
- A change in the type of oil handled, stored, or transferred that materially alters the required response resources;
- A material change in capabilities of the OSRO(s) that provide equipment and personnel to respond to discharges of oil;
- A material change in the facility's spill prevention and response equipment or emergency response procedures; and
- Any other changes that materially affect the implementation of the FRP.

7. SELF-INSPECTION, DRILLS/EXERCISES, PREVENTION, AND RESPONSE TRAINING

40 CFR 112.20(h)(8); 40 CFR 112 APP F, Section 1.8

7.1 FACILITY AND TANK INSPECTIONS

Inspections and tests of oil containers and secondary containment are conducted on a regular frequency dependent on the type of container and its use. Monthly and annual inspections are conducted by appropriately trained company personnel and include container supports and foundations as well as impoundment areas. The following sections describe these inspections. STI SP001, "Standard for the Inspections of Aboveground Storage Tanks" or API Standard 653, "Tank Inspection, Repair, Alteration, and Reconstruction" is used as the standard for all tank inspections.

7.1.1 Monthly Inspections

Visual inspections shall be conducted monthly to monitor and record the condition of each oil-containing tank and container. The checklists provided in Appendix D, or equivalent forms, will be used for these visual inspections. Portable containers, such as drums and totes, may be inspected as a group if they are stored as a group.

Visible leaks or spills are promptly cleaned up and the problem corrected.

Secondary containment for containers 55 gallons or greater are inspected monthly along with the tank inspections. Spills, precipitation, debris, and any other material that could reduce the volume of the secondary containment are removed as soon as practicable.

Valves, piping, and appurtenances connected to oil containers are considered part of the container and included in the inspections.

7.1.2 Inspection Records

At a minimum, all completed inspections and tests are signed by the individual who conducted the inspection and retained on file in the Deadhorse office for at least three years. Records of corrective actions taken are maintained for the service life of the tank.

7.1.3 Certified Inspections and Testing

Certified inspections and testing of shop-fabricated steel tanks and containers by an API- or STI-certified inspector shall be conducted as specified in API 653 or STI SP001. In general, shop-fabricated tanks with capacities of 5,000 gallons or less, that have appropriate environmental controls for both spill prevention and release detection, and are routinely inspected and problems corrected, do not require periodic inspection by certified inspectors. Shop-fabricated tanks with capacities greater than 5,000 gallons and all field-erected tanks are required to have periodic certified inspections.

The frequency of certified external and internal inspections for shop-fabricated tanks is determined by SP001 unless a certified STI or API inspector specifies a different frequency. The frequency of certified

inspections for field-erected tanks can be determined by either SP001 (for tanks under 30 feet in diameter and 50 feet tall) or API 653, or as specified by a certified inspector.

7.1.4 Secondary Containment Inspection

Secondary containment for containers of volume 55 gallons or greater will be inspected monthly along with the tank inspections. Spills, precipitation, debris, and any material that could impede the volume effectiveness of the secondary containment will be removed as soon as practicable after each inspection. Precipitation accumulated in sumps or impoundments, or other types of secondary containment, will be inspected for sheen prior to any removal of fluid.

7.2 FACILITY DRILLS/EXERCISES

Spill response drills are to be conducted regularly using the National Preparedness for Response Exercise Program (PREP) Guidelines Matrix outlined in Table 14. All records of drills, logs of QI notifications, and logs of spill management team exercises will be maintained at the Deadhorse office for a period of at least 5 years and will be made available to regulatory agencies upon formal request.

TABLE 12. NATIONAL PREP GUIDELINES MATRIX

COMPONENT	QUARTERLY	ANNUALLY	TRI-ANNUALLY
1. QI Notification Exercise	✓		
2. Emergency Procedures Drill	✓		
3. Tabletop Exercise		✓	
4. Discharge Control Demonstration		✓	
5. Initial Spill Assessment Demonstration		✓	
6. Demonstrate Containment Capabilities		✓	
7. Demonstrate Recovery Capabilities		✓	
8. Protection of Sensitive Areas			✓
9. Disposal Demonstration			✓
10. Communications Systems Demo.			✓
11. Demonstrate Transportation Systems			✓
12. Support Personnel Demonstration			✓
13. Equipment Maintenance and Support			✓
14. Procurement System Effectiveness			✓
15. Demonstration of Ability to Document			✓
16. Unannounced Exercises		✓	

7.3 PREVENTION AND OPERATIONS TRAINING PROGRAMS

Prevention and operations training for oil spill response personnel is described in Section 7.3.1 below. See Table 15 for Northern's Training Matrix. Training logs are maintained for a period of five years.

Northern recognizes that all oil-handling personnel must be trained and kept current in the operation and maintenance of equipment to prevent discharges; discharge procedure protocols; applicable pollution control laws, rules, and regulations; general facility operations; and the contents of this FRP.

Annual discharge prevention briefings are mandatory for all oil-handling personnel. Such briefings highlight and describe known discharges or failures, malfunctioning components, and any recently developed precautionary measures.

7.3.1 Prevention and Operations Training Programs

Personnel with job duties directly involving operation of oil storage and transfer equipment will be regularly trained on bulk fluid transfer policies and procedures as applicable to each person's duties. Training programs and records are developed and maintained by Northern or Northern's contractors. This training is given prior to assumption of these job responsibilities and/or once yearly for longer term contractors. These records are maintained at Northern's offices or at contractors' offices for a 5-year period, and they are retrievable upon request by the Alaska Department of Environmental Conservation (ADEC).

Personnel at the facility are trained in both oil discharge prevention and oil spill response. The training program provides the information necessary for effective spill prevention and response and to share lessons learned from actual spills and equipment failures, where applicable. Table 3-4 in Part 3 of the CPLAN summarizes the training provided to on-site personnel. Oil discharge prevention training includes:

- Operation and maintenance of equipment to prevent discharges;
- Fuel transfer procedures:
 - Safety (material safety data sheets, personal protective equipment, hazards),
 - Pre-transfer inspections,
 - Secondary containment,
 - *North Slope Environmental Field Handbook* guidelines,
 - Constant line-of-site during fueling, and
 - Valve closure;
- Emergency call numbers;
- Fuel storage:
 - Away from wetlands, if practicable, and
 - Away from storm water drainage areas, if practicable;
- Procedures for inspection of fuel facilities;
- Review of previous spills along with lessons learned;
- Any new developments in spill prevention;

In addition to the above training, oil handlers are familiar with the *North Slope Environmental Field Handbook* as it relates to fuel transfer and handling, drum labeling, secondary containment, and the use of liners and drip trays.

Appropriate personnel are aware of waste issues involving onsite generation, storage, segregation, manifesting, and transportation. They are knowledgeable of hazardous vs. non-hazardous materials and the associated practices in managing the material in accordance with standard operation procedures.

See Table 15 for Northern's Training Matrix.

7.4 SPILL RESPONSE TRAINING

To satisfy ADEC requirements, members of the SRT will participate in an annual spill response/prevention training program/exercise. The training program may vary from year to year; however, at a minimum, it will address the following topics:

- An inspection, operation, and deployment of spill response equipment;
- A review of Northern's current FRP and CPLAN;
- Spill prevention and safe operating and transfer procedures;
- A discussion of potential spills and response actions;
- A review of reporting and regulatory requirements; and
- Operating health and safety considerations.

Table 15 provides a matrix of prevention, safety and spill responder training. Northern operator responders have Class A commercial driver's license (CDL) certification with tanker and Hazmat endorsements. A pre-requisite to the CDL is Hazmat training. Training records are kept in the Deadhorse Northern office for a period of five years.

Chadux provides training for all spill response personnel, and maintains records as required and described in the *Chadux Response Manual*.

North Slope Training Coop (NSTC) curriculum has been adapted since the addition of NSTC certified Safety/Training staff. The training program adapts the curriculum of the NSTC:

- HazCom Right to Know;
- Hazwoper First Responder; and,
- Environmental Excellence.

Northern will utilize third party, NANA Management Services (NMS) Security, certified wildlife hazers if needed during an incident.

7.5 MOBILE FACILITY PIC TRAINING REQUIREMENTS

In compliance with the CG Mobile Facility Person In Charge (PIC) qualifications, PICs are oriented in the contents of the Mobile Facility Operations Manual and the specific operation procedures included in the Operations Manual. Training methods vary from initial job orientations, on the job training, hands on training, and classroom presentations in the form of Power Point presentations, Videos, and open discussions. In addition to becoming familiar with the Mobile Facility Operations Manual, PICs are trained on the various state and federal regulations regarding hazmat transportation, HAZWOPER, SDS, knowledge of each material handled, local and national discharge reporting procedures, FRP, CPLAN, SPCC, oil handling, and

individuals are trained on a basic operating system to which they will be operating such as vessel transfer systems utilized. Training frequency is based on company specific requirements and regulatory compliances established by Northern and state and federal agencies. Most training is required to be completed on an annual basis.

Much of the training meets the requirements for more than one regulation and provides ample overlapping and cross training opportunities. Training records are on site. Refer to Table 15 for Northern's Training Matrix.

TABLE 15. PREVENTION, SAFETY, AND SPILL RESPONDER TRAINING MATRIX

TRAINING REQUIREMENT	FREQUENCY	TRAINING TYPE (OJT, CLASSROOM, ETC.)	REGULATORY REFERENCE	NORTHERN TECHNICIANS AND OPERATORS	TANK FARM OPERATOR	ASSISTANT TANK FARM OPERATOR	LEAD OPERATOR	SAFETY OFFICER	NORTHERN MANAGER
PREVENTION TRAINING									
SPCC	Annual	Classroom	18 AAC 75	X	X	X	X	X	X
FRP	Annual	Classroom	18 AAC 75	X	X	X	X	X	X
CPLAN	Annual	Classroom	18 AAC 75	X	X	X	X	X	X
SWPPP	Annual	Classroom	18 AAC 75	X	X	X	X	X	X
Energy Isolation (Lock-Out/Tag-Out) Awareness	Annual	Classroom	29 CFR 1910.147(c)(7)	As needed	X	X	X	X	As needed
HM232 HazMat Security Training	Every 3 Years	Classroom	49CFR, Part 172.704	X	X	X	X	X	X
Certificate of Entry Level Training (FMCSA)	Initial	Classroom	49CFR, Part 380.503	X	X	X	X	X	X
NOSI Oil Handler	Annual	Classroom	Company Specific	X	X	X	X	X	X
Driver Safety	Annual	Classroom Procedures	Company Specific	X	X	X	X	X	X
SAFETY AND SPILL RESPONDER TRAINING									
Fall Protection	Annual	Procedures, inspections Hands on	29 CFR 1926.503(a)(1)	X	X	X	X	X	X
Fire Extinguisher I	Annual	Procedures Walk through	29 CFR 1910.157	X	X	X	X	X	X
HAZMAT Operations 8 hr.	Annual Refresher	Hands on Class room	31 CFR 1910.120	X	X	X	X	X	Third Party

TABLE 15 (Continued). PREVENTION, SAFETY, AND SPILL RESPONDER TRAINING MATRIX

TRAINING REQUIREMENT	FREQUENCY	TRAINING TYPE (OJT, CLASSROOM, ETC.)	REGULATORY REFERENCE	NORTHERN TECHNICIANS AND OPERATORS	TANK FARM OPERATOR	ASSISTANT TANK FARM OPERATOR	LEAD OPERATOR	SAFETY OFFICER	NORTHERN MANAGER
HAZMAT Technician 40 hr.	Initial	Hands on Procedures	32 CFR 1910.120	As needed	X	X	X	X	Third party
Cold Weather Safety	Annual	Classroom	Company Specific	X	X	X	X	X	X
Safety in Motion	Bi-Annual	Classroom Hands on	Company Specific	X	X	X	X	X	X
HAZWOPER First Responder Awareness	Annual	Classroom Walk through	29 CFR 1910.120	X	X	X	X	X	X
Environmental Excellence	Annual	Classroom	NSTC	X	X	X	X	X	X
HazCom Right-To-Know	Annual	Classroom	29 CFR 1910.20 (g)	X	X	X	X	X	X
ICS Training (ICS-100, ICS-200)	Initial	Computer Based Training - classroom	Federal Emergency Management Agency	X	X	X	X	X	X
ICS Training (ICS-300)	Initial	Procedures (Chadux)	Federal Emergency Management Agency	QI's				X	X

8. SECURITY

40 CFR 112.20(h)(9); 40 CFR 112 APP F, Section 1.9

The Complex is located in the community of Deadhorse, a remote area in Alaska. The population of the community consists almost entirely of professional personnel working for facilities and companies that support the nearby oil fields. In addition to its remote location, the facility's security is maintained by the following:

- The Northern facility is manned by at least one employee during operating hours. Operating activities vary from 12 to 24 hours per day, 7 days a week, except during severely inclement weather.
- Adequate lighting is provided at the facility. Exterior lights illuminate the facility during hours of darkness, and portable lighting is available to assist in spill response.
- Loading/unloading connections of piping are securely capped or blank-flanged when not in service or when in standby service for an extended time.
- Aboveground piping interconnecting the tanks located inside 32-inch Jersey barrier containment walls, safe from vehicular traffic and heavy equipment. Each area that contains aboveground piping also has signs to warn vehicles about the piping. Some aboveground piping runs from the tank farm to a pump house structure about 3 feet from the tank farm and is protected by the narrow passageway that does not allow vehicle access.

9. DIAGRAMS

Facility diagrams are provided in this section, as follows:

- Figure 2. Site Layout – Block 301
- Figure 3. Site Layout – Block 303
- Figure 4. Evacuation Route
- Figure 5. Boom Placement Locations

FIGURE 2. SITE LAYOUT – BLOCK 301

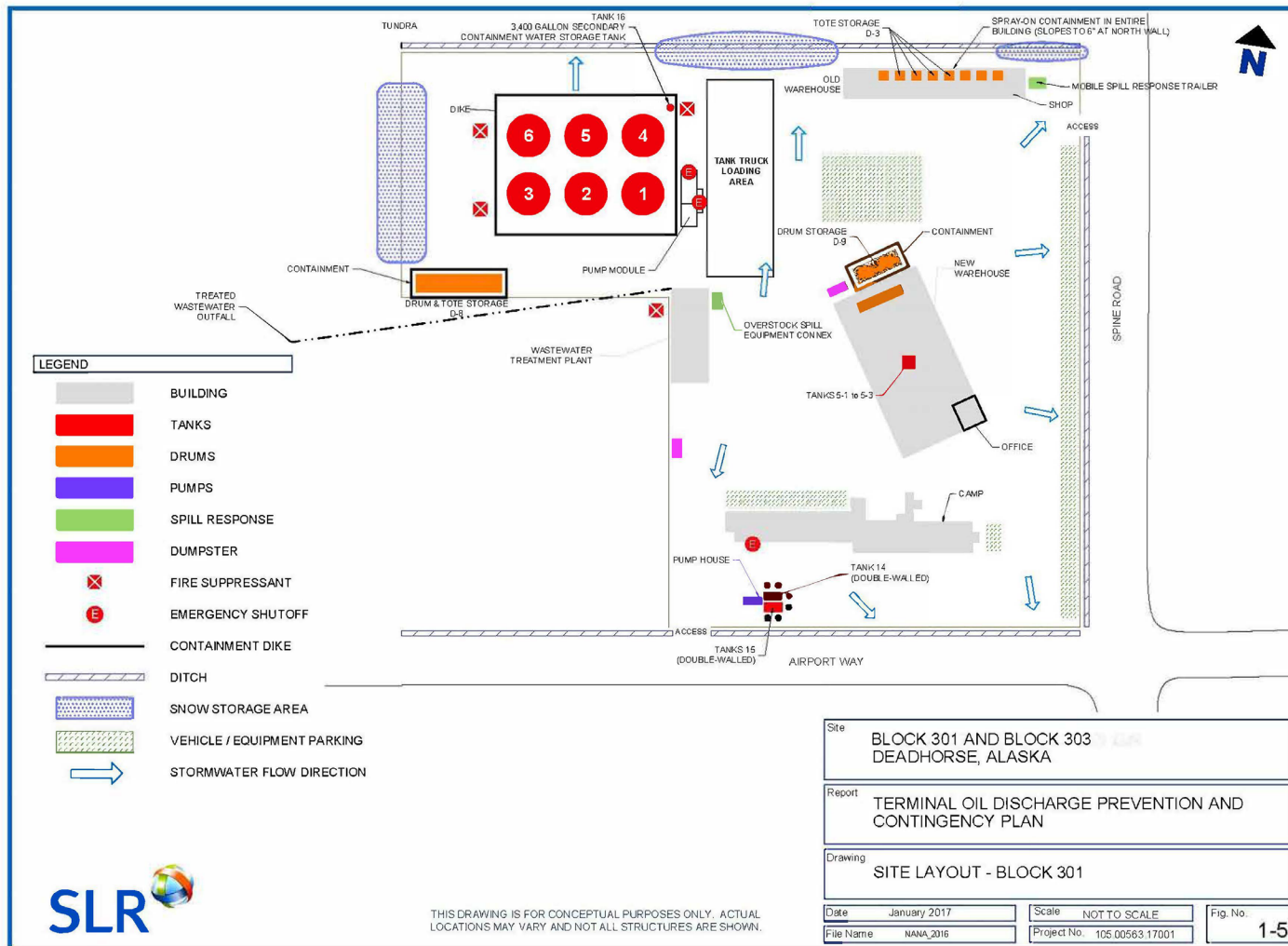


FIGURE 3. SITE LAYOUT – BLOCK 303

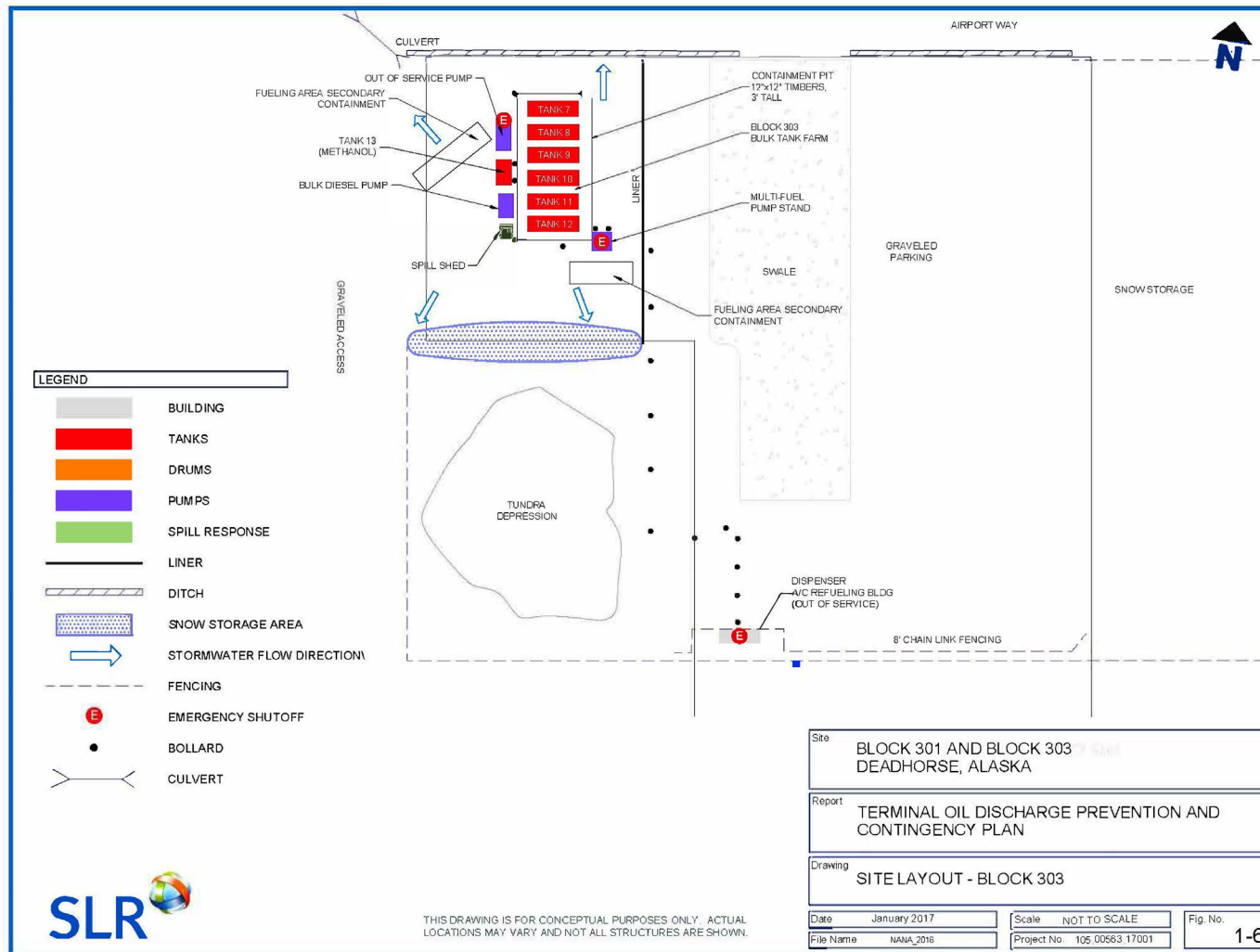


FIGURE 4. EVACUATION ROUTE

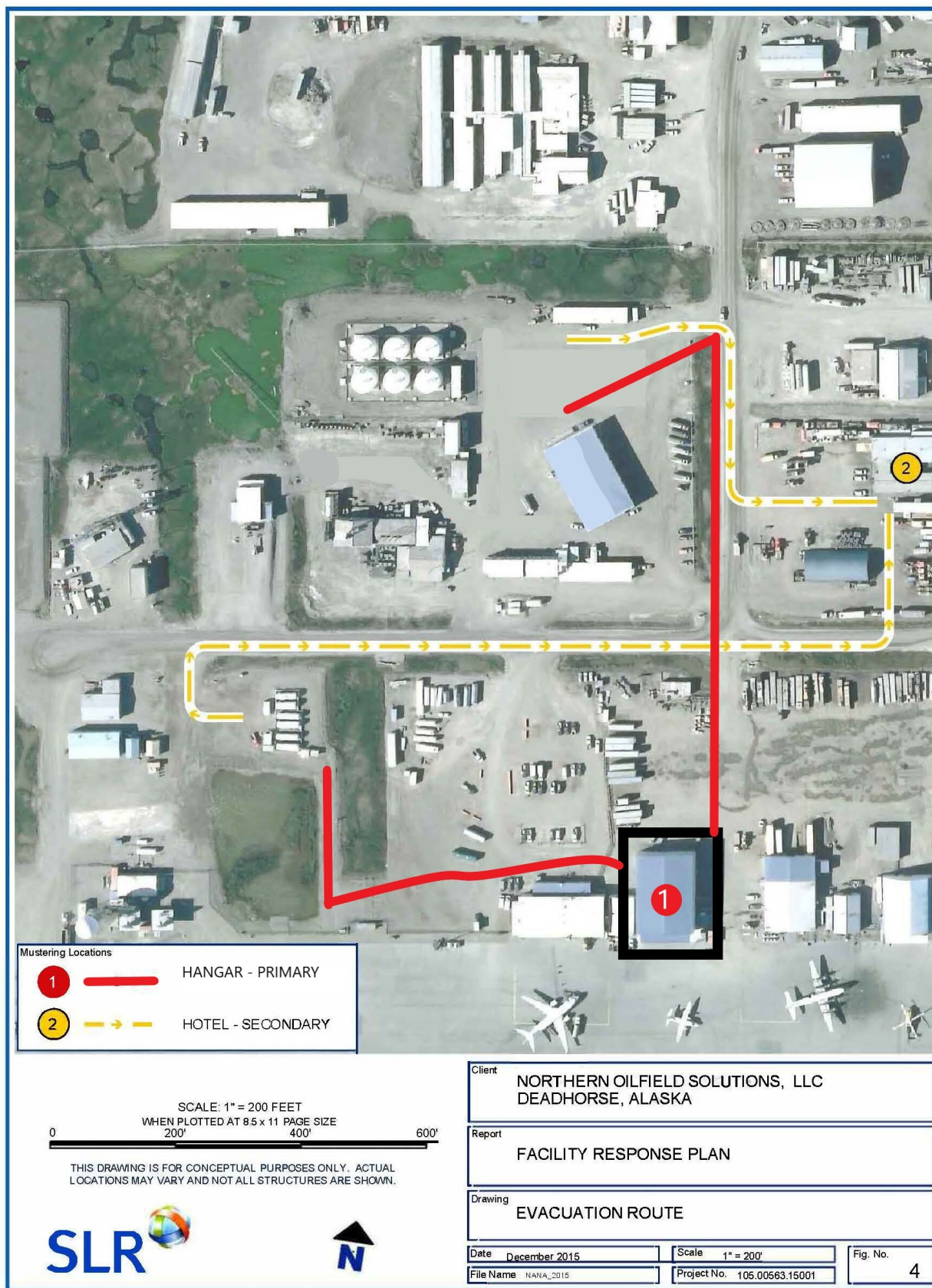


FIGURE 5. BOOM PLACEMENT LOCATIONS



Appendix A – Oil Storage Containers 55 Gallons and Greater

Northern Oilfield Solutions, LLC

Facility Response Plan

Last Revised: January 2019

APPENDIX A - OIL STORAGE CONTAINERS 55 GALLONS AND GREATER

Container ID	Location/Description	Contents	Volume (gal)	Construction	Containment Description	Overfill Prevention / Discharge Monitoring	STI Tank Category	Year Built / Installed	Certified Inspections Due ¹
BULK STORAGE CONTAINERS - ABOVE GROUND (AST), STATIONARY									
1	Block 301	Diesel	203,596	Shop fabricated, vertical	Lined Impoundment ⁵	Auto Shut and Liquid Level Gauge	1	2009 / 2011	2017 (E) / 2019 (I)
2	Block 301	Diesel	203,596	Shop fabricated, vertical	Lined Impoundment ⁵	Auto Shut and Liquid Level Gauge	1	2009 / 2011	2017 (E) / 2019 (I)
3	Block 301	Diesel	203,596	Shop fabricated, vertical	Lined Impoundment ⁵	Auto Shut and Liquid Level Gauge	1	2009 / 2011	2017 (E) / 2019 (I)
4	Block 301	Diesel	203,596	Shop fabricated, vertical	Lined Impoundment ⁵	Auto Shut and Liquid Level Gauge	1	2009 / 2011	2017 (E) / 2019 (I)
5	Block 301	Diesel	203,596	Shop fabricated, vertical	Lined Impoundment ⁵	Auto Shut and Liquid Level Gauge	1	2009 / 2011	2017 (E) / 2019 (I)
6	Block 301	Diesel	203,596	Shop fabricated, vertical	Lined Impoundment ⁵	Auto Shut and Liquid Level Gauge	1	2009 / 2011	2017 (E) / 2019 (I)
7	Block 303	Diesel	20,029	Shop fabricated, horizontal	Lined Impoundment ³	Clock Gauge	1	1975 / 1985	2018 (E) / 2023 (I)
8	Block 303	Diesel	20,029	Shop fabricated, horizontal	Lined Impoundment ³	Clock Gauge	1	1975 / 1985	2018 (E) / 2023 (I)
9	Block 303	Diesel	19,686	Shop fabricated, horizontal	Lined Impoundment ³	Clock Gauge	1	1975 / 1985	2018 (E) / 2023 (I)
10	Block 303	Diesel	19,686	Shop fabricated, horizontal	Lined Impoundment ³	Clock Gauge	1	1975 / 1985	2018 (E) / 2023 (I)
11	Block 303	Unleaded Gasoline, Jet A, or Diesel	19,686	Shop fabricated, horizontal	Lined Impoundment ³	Clock Gauge	1	1975 / 1985	2018 (E) / 2023 (I)
12	Block 303	Unleaded Gasoline, Jet A, Aviation Gas, or Diesel	19,686	Shop fabricated, horizontal	Lined Impoundment ³	Clock Gauge	1	1975 / 1985	2018 (E) / 2023 (I)
14	Vehicle Refueling Station, Block 301	Unleaded Gasoline	9,985	Shop fabricated, horizontal	Double-wall	Camlock connection for filling tank; high level alarm; high level shutoff; overfill bucket	1	2012	2032
15	Vehicle Refueling Station, Block 301	Ultra Low Sulfur Diesel	9,985	Shop fabricated, horizontal	Double-wall	Camlock connection for filling tank; high level alarm; high level shutoff; overfill bucket	1	2012	2032
16	Block 301	Oily Water (from secondary containment areas)	3,400	Shop fabricated, vertical cylindrical	Lined impoundment ⁵	Sight Gauge	1	1983	P
5-1	New Warehouse	Used oil	250	Shop fabricated, rectangular	Warehouse floor ²	Visual, lip around top of tank	1	2009	P
5-2	New Warehouse	Motor Oil	100	Shop fabricated, rectangular	Warehouse floor ²	Sight Gauge	1	2011	P
5-3	New Warehouse	Motor Oil	100	Shop fabricated, rectangular	Warehouse floor ²	Sight Gauge	1	2011	P
TOTAL STATIONARY STORAGE			1,364,198	gallons					

BULK STORAGE CONTAINERS - PORTABLE									
D-3	Old Warehouse, Block 301	Oils / Lubricants	21,450	Totes, 330 gal each, 65 typical	Inside Building, Lined Berm ⁴	Visual	N/A	N/A	P
D-6	New Warehouse	Oils / Lubricants	6,600	Totes, 330 gal each, 20 typical	Warehouse floor ²	Visual	N/A	N/A	P
D-7	New Warehouse	Oils / Lubricants	27,500	Drums, 55 gal each, 500 typical	Warehouse floor ²	Visual	N/A	N/A	P
D-8	South of Block 301 Tank Farm	Oils / Lubricants	2,900	Drums, 55 gal each, 40 typical; Totes, 350 gallons each, 2 typical	Lined containment	Visual	N/A	N/A	P
D-9	New Warehouse, North Side	Oils / Lubricants	1,100	Drums, 55 gal each, 20 typical	Lined containment	Visual	N/A	N/A	P

TOTAL PORTABLE STORAGE 59,550 gallons

TOTAL OIL STORAGE 1,423,748 gallons

Notes:

- All tanks require periodic visual inspections (ref Section 3.5 of SPCC Plan). Certified inspection schedule (internal and external) for tanks greater than 10,000 gallons per facility ODCPC. Certified inspection schedule for tanks 10,000 gallons and under per STI SP001. P=periodic visual inspection; E=formal external inspection; I= formal internal inspection
- Warehouse floor slopes to 2 floor sumps. Blind floor sumps measure 18"x18"x3' (total volume of 2 sumps: 100 gallons). Sumps are emptied by manual pumping to an OWS (4'x3'x2': volume 179 gallons). Sloped floor, OWS and sumps provide sufficient containment for largest single oil container (330 gallons)
- Tanks 7 through 12 share a common impoundment area which measures approximately 40x100x2.5 feet, or 74,800 gallons. Subtracting the volume of bottom 18 inches (assuming 12 inch high saddles) of the shared tanks, the net volume of the impoundment is approximately 65,400 gallons. This provides 326% containment for the largest single tank in the impoundment. The overall impoundment is divided into 3 areas by low walls, and has 3 impermeable liners.
- The 330-gallon totes share a common impoundment area which provides approximately 4,085 gallons capacity. Each tote is elevated off the floor by 5 inches. Subtracting the volume of the-bottom one inch of up to 40 tanks, leaves an available containment capacity of 3735 gallons. The largest individual tank volume is 330 gallons, therefore the impoundment provides 1130% containment.
- Tanks 1 through 6 and 16 share a common impoundment area which measures approximately 154x126x3 feet, or 435,400 gallons. Subtracting the bottom 3 feet of five of the tanks results in a net volume of 345,200 gallons. This provides 170% containment for the largest individual tank.

Appendix B – Worst-Case Discharge Calculations

Northern Oilfield Solutions, LLC

Facility Response Plan

Last Revised: January 2019

Appendix D to Part 112—Determination of a Worst-Case Discharge Planning Volume

PART A: WORST-CASE DISCHARGE PLANNING VOLUME CALCULATION FOR ONSHORE STORAGE FACILITIES

A.2 SECONDARY CONTAINMENT—MULTIPLE-TANK FACILITIES

Are *all* aboveground oil storage tanks or groups of aboveground oil storage tanks at the facility *without* adequate secondary containment?

NO

A.2.1 If the answer is yes, the final worst case discharge planning volume equals the *total aboveground oil storage capacity at the facility*.

N/A

A.2.2 If the answer is no, calculate the total aboveground oil storage capacity of tanks without adequate secondary containment. If *all* aboveground oil storage tanks or groups of aboveground oil storage tanks at the facility have adequate secondary containment, ENTER “0” (zero).

0 GALLONS

A.2.3 Calculate the capacity of the largest single aboveground oil storage tank within an adequate secondary containment area or the combined capacity of a group of aboveground oil storage tanks permanently manifolded together, whichever is greater, PLUS THE VOLUME FROM QUESTION A.2.2.

FINAL WORST CASE VOLUME: **203,596 GALLONS**

ATTACHMENTS TO APPENDIX E

Attachment E-1 --
Worksheet to Plan Volume of Response Resources
for Worst Case Discharge - Petroleum Oils

Part I Background Information

Step (A) Calculate Worst Case Discharge in barrels (Appendix D)

4,848

(A)

Step (B) Oil Group¹ (Table 3 and section 1.2 of this appendix)

1

Step (C) Operating Area (choose one)

☐ Near
shore/Inla
nd Great
Lakes

X

or Rivers
and
Canals

Step (D) Percentages of Oil (Table 2 of this appendix)

Percent Lost to
Natural Dissipation

80

(D1)

Percent Recovered
Floating Oil

10

(D2)

Percent
Oil Onshore

10

(D3)

Step (E1) On-Water Oil Recovery $\frac{\text{Step (D2)} \times \text{Step (A)}}{100}$

485

(E1)

Step (E2) Shoreline Recovery $\frac{\text{Step (D3)} \times \text{Step (A)}}{100}$

485

(E2)

Step (F) Emulsification Factor

(Table 3 of this appendix)

1

(F)

Step (G) On-Water Oil Recovery Resource Mobilization Factor
(Table 4 of this appendix)

Tier 1

0.30

(G1)

Tier 2

0.40

(G2)

Tier 3

0.60

(G3)

¹ A facility that handles, stores, or transports multiple groups of oil must do separate calculations for each oil group on site except for those oil groups that constitute 10 percent or less by volume of the total oil storage capacity at the facility. For purposes of this calculation, the volumes of all products in an oil group must be summed to determine the percentage of the facility's total oil storage capacity.

Attachment E-1 (continued) --
Worksheet to Plan Volume of Response Resources
for Worst Case Discharge - Petroleum Oils

Part II On-Water Oil Recovery Capacity (barrels/day)

Tier 1	Tier 2	Tier 3
146	194	291
Step (E1) x Step (F) x Step (G1)	Step (E1) x Step (F) x Step (G2)	Step (E1) x Step (F) x Step (G3)

Part III Shoreline Cleanup Volume (barrels) 485
Step (E2) x Step (F)

Part IV On-Water Response Capacity By Operating Area
(Table 5 of this appendix)
(Amount needed to be contracted for in barrels/day)

Tier 1	Tier 2	Tier 3
1875	3750	7500
(J1)	(J2)	(J3)

Part V On-Water Amount Needed to be Identified, but not Contracted for in Advance (barrels/day)

Tier 1	Tier 2	Tier 3
0	0	0
Part II Tier 1 - Step (J1)	Part II Tier 2 - Step (J2)	Part II Tier 3 - Step (J3)

NOTE: To convert from barrels/day to gallons/day, multiply the quantities in Parts II through V by 42 gallons/barrel.

Appendix C – Statement of Contractual Terms

Northern Oilfield Solutions, LLC

Facility Response Plan

Last Revised: January 2019

STATEMENT OF CONTRACTUAL TERMS

(PLEASE COMPLETE BOTH SIDES)

AS REQUIRED UNDER AS 46.04.30, AS 46.04.035 and 18 AAC 75.445(i)(1) in fulfillment of a requirement for registration of primary response action contractors and for approval of an Oil Discharge Prevention and Contingency Plan.

PLAN TITLE: Northern Oilfield Solutions, LLC. Terminal Oil Discharge Prevention and Contingency Plan,

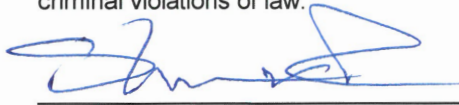
PLAN HOLDER: Northern Oilfield Solution, LLC.,

This statement is a certification to the Alaska Department of Environmental Conservation summarizing the contract between Northern Oilfield Services, LLC., the oil discharge prevention and contingency plan holder (hereafter "PLAN HOLDER"), and Alaska Chadux Corporation, the oil spill primary response action contractor or a holder of an approved oil discharge prevention and contingency plan under contract (hereafter "CONTRACTOR"), executed on 11/18/2018 (effective 1/1/2019), and the original of 420 L Street, Suite 101 Anchorage, AK 99501 which is located at _____, as evidence of the PLAN HOLDER's access to the containment, control and/or cleanup resources required under standards at AS 46.04.030 and 18 AAC 75.400 -- 18 AAC 75.495. The PLAN HOLDER and the CONTRACTOR attest to the Department that the provisions of this written contract clearly obligate the CONTRACTOR to:

- (A) provide the response services and equipment listed for the CONTRACTOR in the contingency plan;
- (B) respond if a discharge occurs;
- (C) notify the PLAN HOLDER immediately if the CONTRACTOR cannot carry out the response actions specified in this contract or the contingency plan;
- (D) give written notice at least 30 days before terminating this contract with the PLAN HOLDER;
- (E) respond to a Department-conducted discharge exercise required of the PLAN HOLDER; and
- (F) continuously maintain in a state of readiness, in accordance with industry standards, the equipment and other spill response resources to be provided by the CONTRACTOR under the contingency plan.

STATEMENT OF CONTRACTUAL TERMS

I hereby certify that, as representative of the PLAN HOLDER, I have the authority to legally bind the PLAN HOLDER in this matter. I am aware that false statements, representations, or certifications may be punishable as civil or criminal violations of law.

 Nov 16, 2018

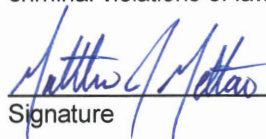
Signature Date

Name: Shannon Price

Title: President

FOR: Northern Oilfield Solutions, LLC.
PLAN HOLDER

I hereby certify that, as representative of the CONTRACTOR, I have the authority to legally bind the CONTRACTOR in this matter. I am aware that false statements, representations, or certifications may be punishable as civil or criminal violations of law.

 Nov 16, 2018

Signature Date

Name: Matt Melton

Title: General Manager

For: Alaska Chadux Corporation
CONTRACTOR

Appendix D – Inspection Checklists

Northern Oilfield Solutions, LLC

Facility Response Plan

Last Revised: January 2019

STI SP001 5th Ed. Monthly Inspection Checklist

STI SP001 5th Ed. Annual Inspection Checklist

STI SP001 5th Ed. Portable Container Inspection Checklist

STI SP001 Annual Inspection Checklist

General Inspection Information:

Inspection Date: _____	Retain Until Date: _____ (36 months from inspection date)
Prior Inspection Date: _____	Inspector Name: _____
Tanks Inspected (ID #'s): _____	

Inspection Guidance:

- ❖ For equipment not included in this Standard, follow the manufacturer recommended inspection/testing schedules and procedures.
- ❖ The periodic AST Inspection is intended for monitoring the external AST condition and its containment structure. This visual inspection does not require a Certified Inspector. It shall be performed by an owner's inspector who is familiar with the site and can identify changes and developing problems.
- ❖ Remove promptly upon discovery standing water or liquid in the primary tank, secondary containment area, interstice, or spill container. Before discharge to the environment, inspect the liquid for regulated products or other contaminants and disposed of it properly.
- ❖ In order to comply with EPA SPCC (Spill Prevention, Control and Countermeasure) rules, a facility must regularly test liquid level sensing devices to ensure proper operation (40 CFR 112.8(c)(8)(v)).
- ❖ (*) designates an item in a non-conformance status. This indicates that action is required to address a problem.
- ❖ Non-conforming items important to tank or containment integrity require evaluation by an engineer experienced in AST design, a Certified Inspector, or a tank manufacturer who will determine the corrective action. Note the non-conformance and corresponding corrective action in the comment section.
- ❖ Retain the completed checklists for 36 months.
- ❖ Complete this checklist on an annual basis supplemental to the owner monthly-performed inspection checklists.
- ❖ Note: If a change has occurred to the tank system or containment that may affect the SPCC plan, the condition should be evaluated against the current plan requirement by a Professional Engineer knowledgeable in SPCC development and implementation.

Item	Task	Status	Comments
1.0 Tank Containment			
1.1 Containment structure	Check for: <ul style="list-style-type: none"> Holes or cracks in containment wall or floor Washout Liner degradation Corrosion Leakage Paint failure Tank settling 	Yes* No N/A	
2.0 Tank Foundation and Supports			
2.1 Foundation	Settlement or foundation washout?	Yes* No	
2.2 Concrete pad or ring wall	Cracking or spalling?	Yes* No N/A	

Item	Task	Status	Comments
2.3 Supports	Check for corrosion, paint failure, etc.	Yes* No N/A	
2.4 Water drainage	Water drains away from tank?	Yes No* N/A	
2.5 Tank grounding	Strap secured and in good condition?	Yes No* N/A	
3.0 Cathodic Protection			
3.1 Galvanic cathodic protection system	Confirm system is functional, includes the wire connections for galvanic systems	Yes No* N/A	
3.2 Impressed current system	a. Inspect the operational components (power switch, meters, and alarms).	Yes No* N/A	
	b. Record hour meter, ammeter and voltmeter readings.	Yes No* N/A	
4.0 Tank Shell, Heads, Roof			
4.1 Coating	Check for coating failure	Yes* No	
4.2 Steel condition	Check for: <ul style="list-style-type: none"> • Dents • Buckling • Bulging • Corrosion • Cracking 	Yes* No	
4.3 Roof slope	Check for low points and standing water	Yes* No N/A	
5.0 Tank Equipment			
5.1 Vents	Verify that components are moving freely and vent passageways are not obstructed for: <ul style="list-style-type: none"> • Emergency vent covers • Pressure/vacuum vent poppets • Other moving vent components 	Yes* No	

Item	Task	Status	Comments
5.2 Valves	Check the condition of all valves for leaks, corrosion and damage.	Yes* No	
5.2.1 Anti-siphon, check and gate valves	Cycle the valve open and closed and check for proper operation.	Yes No* N/A	
5.2.2 Pressure regulator valve	Check for proper operation. (Note that there may be small, 1/4 inch drain plugs in the bottom of the valve that are not visible by looking from above only)	Yes No* N/A	
5.2.3 Expansion relief valve	Check that the valve is in the proper orientation. (Note that fuel must be discharged back to the tank via a separate pipe or tubing.)	Yes No* N/A	
5.2.4 Solenoid valves	Cycle power to valve to check operation. (Electrical solenoids can be verified by listening to the plunger opening and closing. If no audible confirmation, the valve should be inspected for the presence and operation of the plunger.)	Yes No* N/A	
5.2.5 Fire and shear valves	a. Manually cycle the valve to ensure components are moving freely and that the valve handle or lever has clearance to allow valve to close completely.	Yes No* N/A	
	b. Valves must not be wired in open position.	Yes No* N/A	

Item	Task	Status	Comments
	c. Make sure fusible element is in place and correctly positioned.	Yes No* N/A	
	d. Be sure test ports are sealed with plug after testing is complete and no temporary test fixture or component remains connected to valve.	Yes No* N/A	
5.3 Interstitial leak detection equipment	Check condition of equipment, including: <ul style="list-style-type: none"> The window is clean and clear in sight leak gauges. The wire connections of electronic gauges for tightness and corrosion Activate the test button, if applicable. 	Yes No* N/A	
5.4 Spill containment boxes on fill pipe	a. If corrosion, damage, or wear has compromised the ability of the unit to perform spill containment functions, replace the unit.	Yes* No N/A	
	b. Inspect the connections to the AST for tightness, as well as the bolts, nuts, washers for condition and replace if necessary.	Yes* No N/A	
	c. Drain valves must be operable and closed	Yes* No N/A	
5.5 Strainer	a. Check that the strainer is clean and in good condition.	Yes No* N/A	

Item	Task	Status	Comments
5.5 Strainer	b. Access strainer basket and check cap and gasket seal as well as bolts.	Yes No* N/A	
5.6 Filter	a. Check that the filter is in good condition and is within the manufacturer's expected service life. Replace, if necessary.	Yes No* N/A	
	b. Check for leaks and decreased fuel flow	Yes No* N/A	
5.7 Flame arrestors	Follow manufacturer's instructions. Check for corrosion and blockage of air passages.	Yes* No N/A	
5.8 Leak detector for submersible pump systems	Test according to manufacturer's instructions and authority having jurisdiction (AHJ). Verify leak detectors are suited and properly installed for aboveground use.	Yes No* N/A	
5.9 Liquid level equipment	a. Has equipment been tested to ensure proper operation?	Yes No* N/A	
	b. Does equipment operate as required?	Yes No* N/A	
	c. Follow manufacturer's instructions	Yes No* N/A	
5.10 Overfill equipment	a. Follow manufacturer's instructions and regulatory requirements for inspection and functionality verification.	Yes No* N/A	
	b. Confirm device is suited for above ground use by the manufacturer	Yes No* N/A	

STI SP001 Monthly Inspection Checklist

General Inspection Information:

Inspection Date: _____	Retain Until Date: _____ (36 months from inspection date)
Prior Inspection Date: _____	Inspector Name: _____
Tanks Inspected (ID #'s): _____	

Inspection Guidance:

- ❖ For equipment not included in this Standard, follow the manufacturer recommended inspection/testing schedules and procedures.
- ❖ The periodic AST Inspection is intended for monitoring the external AST condition and its containment structure. This visual inspection does not require a Certified Inspector. It shall be performed by an owner's inspector who is familiar with the site and can identify changes and developing problems.
- ❖ Upon discovery of water in the primary tank, secondary containment area, interstice, or spill container, remove promptly or take other corrective action. Before discharge to the environment, inspect the liquid for regulated products or other contaminants and disposed of it properly.
- ❖ (*) designates an item in a non-conformance status. This indicates that action is required to address a problem.
- ❖ Non-conforming items important to tank or containment integrity require evaluation by an engineer experienced in AST design, a Certified Inspector, or a tank manufacturer who will determine the corrective action. Note the non-conformance and corresponding corrective action in the comment section.
- ❖ Retain the completed checklists for 36 months.
- ❖ In the event of severe weather (snow, ice, wind storms) or maintenance (such as painting) that could affect the operation of critical components (normal and emergency vents, valves), an inspection of these components is required as soon as the equipment is safely accessible after the event.

Item	Task	Status	Comments
1.0 Tank Containment			
1.1 Containment structure	Check for water, debris, cracks or fire hazard	Yes* No N/A	
1.2 Primary tank	Check for water	Yes* No	
1.3 Containment drain valves	Operable and in a closed position	Yes No* N/A	
1.4 Pathways and entry	Clear and gates/doors operable	Yes No* N/A	
2.0 Leak Detection			
2.1 Tank	Visible signs of leakage	Yes* No	
2.2 Secondary Containment	Visible signs of leakage from tank into secondary containment	Yes* No	
2.3 Surrounding soil	Visible signs of leakage	Yes* No N/A	
2.4 Interstice	Visible signs of leakage	Yes* No N/A	

Item	Task	Status	Comments
3.0 Tank Equipment			
3.1 Valves	a. Check for leaks.	Yes* No N/A	
	b. Tank drain valves must be kept locked.	Yes* No N/A	
3.2 Spill containment boxes on fill pipe	a. Inspect for debris, residue, and water in the box and remove.	Yes* No N/A	
	b. Drain valves must be operable and closed.	Yes* No N/A	
3.3 Liquid level equipment	a. Both visual and mechanical devices must be inspected for physical damage.	Yes No* N/A	
	b. Check that the device is easily readable	Yes No* N/A	
3.4 Overfill equipment	a. If equipped with a "test" button, activate the audible horn or light to confirm operation. This could be battery powered. Replace the battery if needed	Yes No* N/A	
	b. If overfill valve is equipped with a mechanical test mechanism, actuate the mechanism to confirm operation.	Yes No* N/A	
3.5 Piping connections	Check for leaks, corrosion and damage	Yes* No	
4.0 Tank Attachments and Appurtenances			
4.1 Ladder and platform structure	Secure with no sign of severe corrosion or damage?	Yes No* N/A	
5.0 Other Conditions			
5.1	Are there other conditions that should be addressed for continued safe operation or that may affect the site spill prevention plan?	Yes* No	

This image shows a blank sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

STI SP001 Portable Container Monthly Inspection Checklist

General Inspection Information:

Inspection Date: _____	Retain Until Date: _____ (36 months from inspection date)
Prior Inspection Date: _____	Inspector Name: _____
Containers Inspected (ID #'s): _____	

Inspection Guidance:

- ❖ For equipment not included in this Standard, follow the manufacturer recommended inspection/testing schedules and procedures.
- ❖ The periodic AST Inspection is intended for monitoring the external AST condition and its containment structure. This visual inspection does not require a Certified Inspector. It shall be performed by an owner's inspector who is familiar with the site and can identify changes and developing problems.
- ❖ (*) designates an item in a non-conformance status. This indicates that action is required to address a problem.
- ❖ Non-conforming items important to tank or containment integrity require evaluation by an engineer experienced in AST design, a Certified Inspector, or a tank manufacturer who will determine the corrective action. Note the non-conformance and corresponding corrective action in the comment section.
- ❖ Retain the completed checklists for 36 months.

Item	Area: _____		Area: _____		Area: _____		Area: _____	
1.0 AST Containment/Storage Area								
1.1 ASTs within designated storage area?	Yes	No*	Yes	No*	Yes	No*	Yes	No*
1.2 Debris, spills, or other fire hazards in containment or storage area?	Yes*	No	Yes*	No	Yes*	No	Yes*	No
1.3 Water in outdoor secondary containment?	Yes*	No	Yes*	No	Yes*	No	Yes*	No
1.4 Drain valves operable and in a closed position?	Yes	No*	Yes*	No	Yes*	No	Yes*	No
1.5 Egress pathways clear and gates/doors operable?	Yes	No*	Yes*	No	Yes*	No	Yes*	No

Appendix E – Vessel Information

Northern Oilfield Solutions, LLC

Facility Response Plan

Last Revised: January 2019

Size, Type and Number of Vessels that the Facility Can Simultaneously Handle

Northern's Mobile Facilities can only transfer to one Vessel at a time. There will never be a situation where two vessels are being transferred to simultaneously from the same Northern Mobile Facility.

The general types and sizes of vessels which Northern's Mobile Facility can transfer to are as follows:

1. Tug Boats: 60-80 feet in length,
2. Barge: the barge is permanently moored on shore with a generator conex on deck,
3. Landing Craft: 100-120 feet in length, and
4. Crew Boats: 40-60 feet in length.